

# NAVAL POSTGRADUATE SCHOOL

## Monterey, California



## THESIS

**ECONOMIC GROWTH IN SOUTH KOREA:  
GOVERNMENT OR FREE MARKET ACHIEVEMENT?**

by

Antonio Carlos Stangherlin Rebelo

December 1995

Thesis Advisor:

David R. Henderson

Approved for public release; distribution is unlimited.

DTIC QUALITY INSPECTED 1

19960405 067

<b>REPORT DOCUMENTATION PAGE</b>			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE (Leave Blank)		2. REPORT DATE December 1995		3. REPORT TYPE AND DATES COVERED Master's Thesis
4. TITLE AND SUBTITLE ECONOMIC GROWTH IN SOUTH KOREA: GOVERNMENT OR FREE MARKET ACHIEVEMENT?			5. FUNDING NUMBERS	
6. AUTHOR(S) Rebelo, Antonio C. S.				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the United States Government.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) This thesis is an attempt to access how good has been the South Korean economic performance since the end of the Korean War and how interventionist the government has been, and to decide what has been responsible for the economic growth, the government or the free market. The main indicators of the Korean performance and the roles of the government and of the free market on the economy are discussed. A regression is run relating the GDP growth rate to the degree of trade liberalization and government spending. The findings can be summarized as follows: 1) The Korean performance has been outstanding. 2) The government and free market's roles and their contributions to the economic growth have varied in different periods in the Korean economy. First was the period from the end of the Korean War until the military coup of 1961, with government highly interventionist, the free market repressed, and poor results. Second was the period from 1961 until 1980, characterized by an interplay between the government and the free market leading to a high economic growth. Third was the period from 1980 to the present, the liberalization period, with market forces being the main source of the high economic growth. 3) The economy has been negatively affected by government spending and trade restrictions.				
14. SUBJECT TERMS Interventionism, Free Market, Economic Growth, South Korea.			15. NUMBER OF PAGES 87	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL	



Approved for public release; distribution is unlimited

**ECONOMIC GROWTH IN SOUTH KOREA: GOVERNMENT OR FREE  
MARKET ACHIEVEMENT ?**

Antonio Carlos Stangherlin Rebelo  
Lieutenant Colonel, Brazilian Air Force  
B. S., Brazilian Air Force Academy, 1978

Submitted in partial fulfillment of the  
requirements for the degree of


**MASTER OF SCIENCE IN MANAGEMENT**

from the

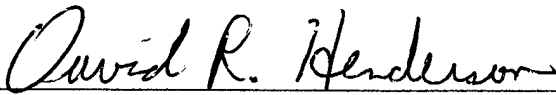
**NAVAL POSTGRADUATE SCHOOL**


December 1995

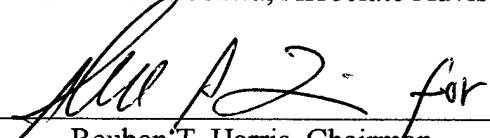
Author: \_\_\_\_\_

  
Antonio Carlos Stangherlin Rebelo

Approved by: \_\_\_\_\_

  
David R. Henderson, Thesis Advisor

  
Katsuaki L. Terasawa, Associate Advisor

 for  
Reuben T. Harris, Chairman  
Department of Systems Management



## **ABSTRACT**

This thesis is an attempt to assess how good has been the South Korean economic performance since the end of the Korean War and how interventionist the government has been, and to decide what has been responsible for the economic growth, the government or the free market. The main indicators of the Korean performance and the roles of the government and of the free market on the economy are discussed. A regression is run relating the GDP growth rate to the degree of trade liberalization and government spending.

The findings can be summarized as follows: 1) The Korean performance has been outstanding. 2) The government and free market's roles and their contributions to the economic growth have varied in different periods in the Korean economy. First was the period from the end of the Korean War until the military coup of 1961, with government highly interventionist, the free market repressed, and poor results. Second was the period from 1961 until 1980, characterized by an interplay between the government and the free market leading to a high economic growth. Third was the period from 1980 to the present, the liberalization period, with market forces being the main source of the high economic growth. 3) The economy has been negatively affected by government spending and trade restrictions.



## TABLE OF CONTENTS

I.	INTRODUCTION .....	1
A.	BACKGROUND.....	1
B.	OBJECTIVES .....	1
C.	SCOPE AND LIMITATIONS .....	2
D.	ORGANIZATION OF STUDY .....	2
II.	DEFINING FREE MARKET AND INTERVENTIONISM.....	5
A.	FREE MARKET .....	5
B.	INTERVENTIONISM.....	6
III.	KOREAN PERFORMANCE.....	9
A.	GDP GROWTH .....	9
B.	INTERNATIONAL TRADE .....	11
C.	INVESTMENT .....	15
D.	FINANCING THE GROWTH.....	17
IV.	EXPLAINING KOREAN ECONOMIC GROWTH.....	21
A.	THE CONTEXT AND THEORY .....	21
B.	EXPLANATIONS FOR THE EAST ASIAN SUCCESS .....	25
1.	Free Market (FM) Theory .....	25
2.	Simulated Free Market (SM) Theory.....	30
3.	Governed Market (GM) Theory.....	31
V.	THE ROLE OF THE GOVERNMENT AND THE PRIVATE MARKET ...	35
A.	ANTECEDENTS OF THE HIGH-GROWTH PERIOD.....	35
B.	THE PERIOD OF RAPID GROWTH (1960s AND 1970s).....	36
1.	Public Enterprises .....	38
2.	The Financial Sector .....	39
3.	Business Concentration .....	41
4.	The Export-Oriented Strategy.....	42
5.	The Heavy and Chemical Industries Plan.....	46
C.	THE LIBERALIZATION OF THE 1980s .....	49



1.	Exchange Rate Policy .....	50
2.	Import Liberalization .....	50
3.	Financial Liberalization .....	52
4.	Preferential Credit Policy .....	54
5.	Income Tax Reform .....	56
6.	Liberalization and Economic Growth .....	56
7.	Government Spending and Economic Growth .....	61
VI.	ANALYSIS .....	65
VII	CONCLUSION .....	71
	LIST OF REFERENCES .....	73
	INITIAL DISTRIBUTION LIST .....	77

## **I. INTRODUCTION**

### **A. BACKGROUND**

South Korea is a small, densely populated country of about 99,000 square kilometers. In 1994, its population was 44.45 million (IMF, 1995, p. 483). It has limited natural resources. Its mountainous terrain does not favor agriculture. From the end of the Korean war until the military coup of 1961 (1954-61), Korean growth of GDP averaged 4.1%. From 1962 until 1993, however, this growth averaged the impressive level of 8.54%. As a result of this performance, it now has much in common with the industrialized countries of the world.

### **B. OBJECTIVES**

Korean economic performance has been the subject of great interest and controversy among economists, especially those who advise developing countries. While these countries have been facing so many difficulties, with low growth rates, and many of them witnessing the fall of their already low standards of living, the Korean economy has been growing persistently. Leading economists of the International Monetary Fund and the World Bank are supporters of the free market theory of rapid growth. Therefore, their prescription for development is liberalization and privatization (Wade 1990, p. 5). In opposition to them are those economists who defend government intervention. Each side explains the South Korean growth from a different perspective. For economists who believe in free market as a way to achieve sustained growth, this success came as a result of market forces working over a suitable environment provided by the state. For those who support the idea of government intervention, this achievement is due to the correct interventionist policies adopted by the South Korean government. There are even economists who even argue that the Korean performance has not been that good.

Many questions come into play at this point. Why did South Korean economy do so well after the Korean War? How good was the Korean performance? Did the South

Korean government intervene heavily in the economy? Did South Korea's economic growth vary directly with the degree of government intervention or did South Korea's economy do well in spite of the government intervention? This study is an attempt to decide which side of the controversy is right or close to being right. If the Korean case is found to be supportive of the current free market prescription, the guidelines for developing countries can be maintained. But if the argument that the government steerage of the economy has been the prevailing factor in this country, then the guidelines need to be reassessed (Wade 1990, p. 5).

### **C. SCOPE AND LIMITATIONS**

This study focuses on the main aspects of the Korean development. The main facts about South Korea's economic performance are presented and discussed. The roles played by the government and private sector and their effects on the economic growth are analyzed.

Distances between The United States and The Republic of South Korea prevented hands-on examination of pertinent documentation to this thesis research. Time, or lack thereof, was also a factor which limited research to items within easy reach. Data about government policies and official results was therefore gleaned from data already reported in studies by other authors.

### **D. ORGANIZATION OF STUDY**

The remainder of this thesis is composed of six chapters. Chapter II presents the concepts of free market and interventionism focusing on the sense in which these words are used throughout this study. Chapter III presents the key facts about South Korea's economic performance over the last three decades. Chapter IV shows the context and main theories that explain the Korean economic growth: the free market theory, the simulated free market theory, and governed market theory. Chapter V discuss the main policies adopted by the government, the response of the private market, and the relation of these roles to the relevant results in terms of economic growth. Chapter VI analyzes

and offers an interpretation about the contribution of the government and the private market to the economic growth. Chapter VII summarizes the findings of this research.



## II. DEFINING FREE MARKET AND INTERVENTIONISM

Before entering the main discussion of this study, I will offer my understanding of the concepts of Free Market and Government Intervention. This is so that the exact sense in which these concepts are used throughout this text is clear. It is necessary because this thesis is an attempt to decide what is responsible for the outstanding economic growth achieved by South Korea, the government's interventionist policies or market forces. These concepts will be central in the argument and should be well delineated in order to avoid miscommunication.

It should be noted, however, that this is not an attempt to define or confront and judge the merit of each different theory of economic thought. Clarification of these terms is vital in a thorough discussion of these issues.

### A. FREE MARKET

The free market is an environment where the individuals have the freedom to decide what to do with their resources. In his article "Capitalism" in *The Fortune Encyclopedia of Economics*, Robert Hessen, a business historian, writes:

Subject to certain restrictions, individuals (alone or with others) are free to decide where to invest, what to produce or sell, and what prices to charge, and there is no natural limit to the range of their efforts in terms of assets, sales and profits, or the number of customers, employees, and investors, or whether they operate in local, regional, national, or international markets. (Hessen, 1993)

Because of its use as a direct opposition to socialism, the word capitalism carries an ideological content and a broad meaning. I prefer the idea of a free market that is more easily related to economics, and is fitting to the context of this research. Nevertheless, this statement translates the message of free market that I will focus on in this analysis.

It is interesting to note in the above example that Professor Hessen mentions *certain restrictions* in this freedom to decide. He does not explain what these restrictions are. I feel that Hessen means that they are not restrictions imposed by the government but some limitations imposed by the market itself. Since all individuals have the same

freedom, some boundaries must exist between the independence of each one. Before deciding what to do with his resources, each person must take into consideration whether that decision will impinge on the freedom of other individuals in the society. Any limitation thus imposed on the citizen by the government demands some sort of intervention.

## **B. INTERVENTIONISM**

Interventionism is an environment where the government, not individuals, controls the use of resources. This is the opposite of a free market economy. It does not mean that the government has to directly apply the resources on its own, but that it exerts a definite influence and power in the allocation of the resources. This authority is exercised through a set of measures that force individuals to use their resources the way the government dictates that they be used. These measures refer to control over price, exchange rates, interest rates and wages. They also encompass the imposition of import barriers (namely quotas and tariffs) and export tariffs, taxation, concession of subsidies, and credit allocation.

Let me make clear also how the word “intervention” is used in this text. Simply stated, intervention, in my opinion, is not just government action. It is a measure adopted by the government that limits the individuals’ freedom to make choices. It should not be confused with just a government act. The government can act by removing an intervention that was previously imposed. This is moving away from interventionism to a free market economy.

In his working paper, “Getting Interventions Right: How South Korea and Taiwan Grew Rich”, Dani Rodrik (1994) effectively illustrates my ideas. He states that:

...the Korean and Taiwanese governments managed to engineer a significant increase in the private return to capital. They did so not only by removing a number of impediments to investment and establishing a sound investment climate, but more importantly by alleviating a coordination failure which had blocked economic take-off. The latter required a range of strategic interventions....

While the latter, the coordination failure, may have required interventionist measures, the removal of the impediments to investment and the establishment of a sound investment climate required measures that are not interventions. On the contrary, it means that the government ultimately reduced interventions in the economy.

As a final comment to what was previously stated, one last point should be made. It is that neither a fully market-free economy nor an absolutely interventionist government currently exist. In the words of Professor Hessen (1993): "A fully free economy (*laissez-faire*) never has existed...." Some degree of freedom always exists for individuals to decide how their resources should be utilized. Some degree of government intervention is present at the same time. The market has some degree of freedom in how it is run. In fact, the economies are perceived to the extent in which their governments intervene on them, thus causing them to be labeled more or less interventionist. One thing for sure is that the way the market is run has influence on its economic performance.





### **III. KOREAN PERFORMANCE**

In this chapter, some of the key facts about South Korea's economic performance over the last three decades will be presented. This performance has caused South Korea to be widely considered a role model of economic growth to many developing countries. There are reasons for this popularity. In 1950, its per capita income was about \$553 (in 1990 dollars)<sup>1</sup> and the life expectancy of its citizens was about 50 years (World Bank, 1989, p. 2). Forty years later, its per capita income was about \$ 5,917 (in 1990 dollars) (IMF, 1994, p. 463), and the average life expectancy was 71 years (World Bank, 1992, p. 219). Now, South Korea's economy has more in common with the industrial economies than with the poorest economies in South Asia.

Although this data is impressive, there is no unanimity among economists about how excellent this performance is and to what extent it serves as a model. It depends on what each economist perceives as being the major sources of this growth and how adequate they are in promoting a sustained future growth. Paul Krugman (1994) provides some ideas about this controversy when he states that "the rapid Asian growth is less of a model for the West than many writers claim, and the future prospects for that growth are more limited than almost anyone now imagines." In one aspect, however, all economists agree: growth has been exceptional. The numbers indicate this change. Interpretation of its excellence and what future perspectives might be is open for critical discussion.

#### **A. GDP GROWTH**

Figure 3.1 is the chief exhibit to show South Korea's outstanding achievement: the growth in GDP and GDP per capita. Although the economic growth has fluctuated year after year, its broad tendency is evident. First was an initial period when the GDP grew at low rates. This period lasted from the 1950s until 1962. Following this period, GDP growth was sustained around a high mean until the late 1980s. In more recent years, a slight decreasing trend started. In a broad sense, this exhibit shows that the economic growth is fluctuating around a high mean.

---

<sup>1</sup> The dollar value cited in the reference was \$350 (in 1980 dollars). It was converted to the 1990 basis using the GDP deflator table from IMF, International Financial Statistics Yearbook, 1994.

The South Korean economy shows signs of being negatively affected in two periods in the 1970s, from 1970 to 1972, and from 1977 to 1980. In these periods a decreasing tendency in the growth rates can be seen. The first oil shock seems to be linked with the first period. The second period was particularly significant. A negative growth occurred in 1980. It was the first time since 1956 that the economy experienced this type of result. The effect of the second oil shock, the turbulent political climate that followed President Park's assassination in 1979, and the poor rice harvest of 1980 seem to be linked with this marked decrease in growth. A quick recovery from both these events is evident, however.

What guarantees its status of being "remarkable" is not just the fact that South Korea's economy has been growing at a high mean, but the difference it makes when compared with other countries. Its GDP growth averaged 8.84% from 1964 to 1992. Concurrently, the developing countries' GDP grew at an average of 4.66% and the industrialized countries grew at 3.26% (IMF, 1994). In fact, none of today's wealthy countries had such a rapid transformation in their respective economies. They became prosperous through gradual, methodical growth.

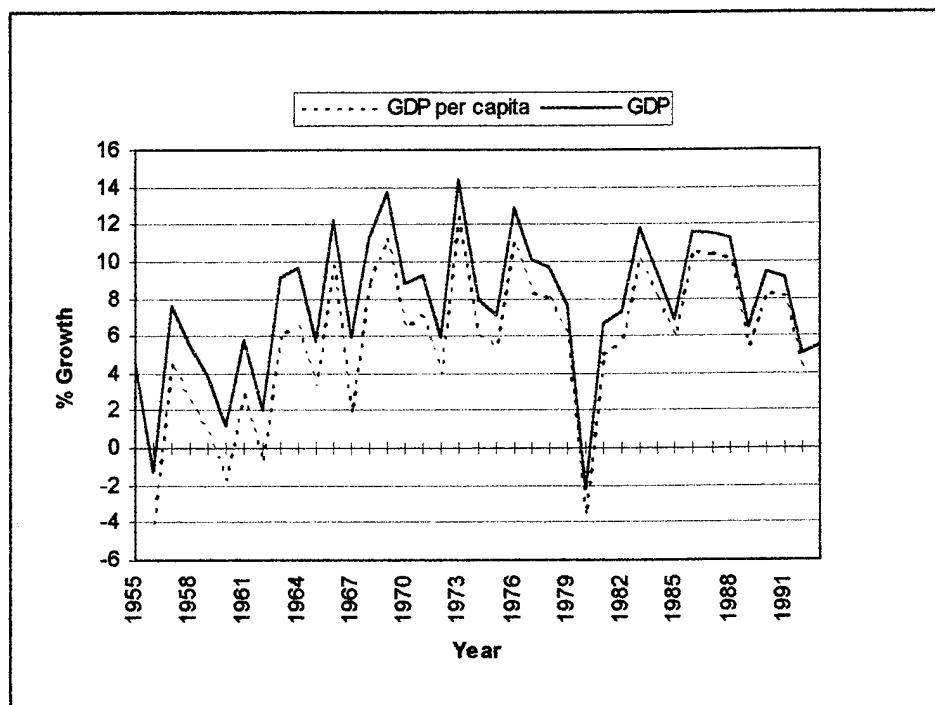


Figure 3.1. Growth in GDP and GDP per Capita

Source: IMF, International Financial Statistics Yearbook, 1984 and 1994.

The GDP per capita growth reveals another significant fact about South Korea's performance. It increased at almost the same rate as the GDP did. This sharp rise occurred because the economy has been growing faster than the population. In fact, the population growth rate decreased from about 3% in the 1950s to less than 1% in the late 1980s<sup>2</sup>. This is a curious fact in the examination of a developing country. The population growth rate in this category of nations does not show this decreasing tendency. This fact, however, is not of capital significance, nor is it even an issue worthy of pursuit. What matters is that the economy is able to grow faster than the population.

## **B. INTERNATIONAL TRADE**

South Korea's status as an export country has been pointed out by some economists as the primary reason for its economic success. This export-led hypothesis explains how newly-industrialized Asian countries have grown as a result of an outward-trade orientation adopted by their governments. The increase in the export-GDP ratio is an important argument for this supposition. A statement from Ian Little (1994), exemplifies this opinion:

...the outstanding success of Korea and Taiwan from the early 1960s to the mid-1970s was based on a phenomenal growth of labor-intensive manufactures. This branch of manufacturing took off because exports were highly profitable once the bias against manufacturing for export was removed.

The World Bank's recent study (1989, p. 6) emphasizes this point. Its conclusion states that "the dragons' success as exporters gave them abundant foreign exchange with which to buy investment goods from abroad, so a virtuous circle of exceptionally rapid growth began."

Figure 3.2 presents information that is surprising to a certain extent. The export-GDP ratio has risen from virtually 0% in the late 1950s to almost 35% in the late 1980s. It rose particularly rapidly from the early 1960s to the mid-1970s. This was the period when the Korean economy took off. The ratio's increase slowed down somewhat after that period but persisted until the mid-1980s, when it began a marked decrease.

---

<sup>2</sup> Source: IMF, International Financial Statistics Yearbook, 1984 and 1994.

When observed by itself, the export-GDP ratio is impressive and consistent with the export-led hypothesis. The surprise occurs when it is juxtaposed with the import-GDP ratio of the same graph. It would be reasonable to expect a persistent surplus in external trade from a country whose strength is based upon exportation of goods. Yet, South Korea has been maintaining a considerable deficit. A trade surplus was achieved only for a short period of time between 1986 to 1989.

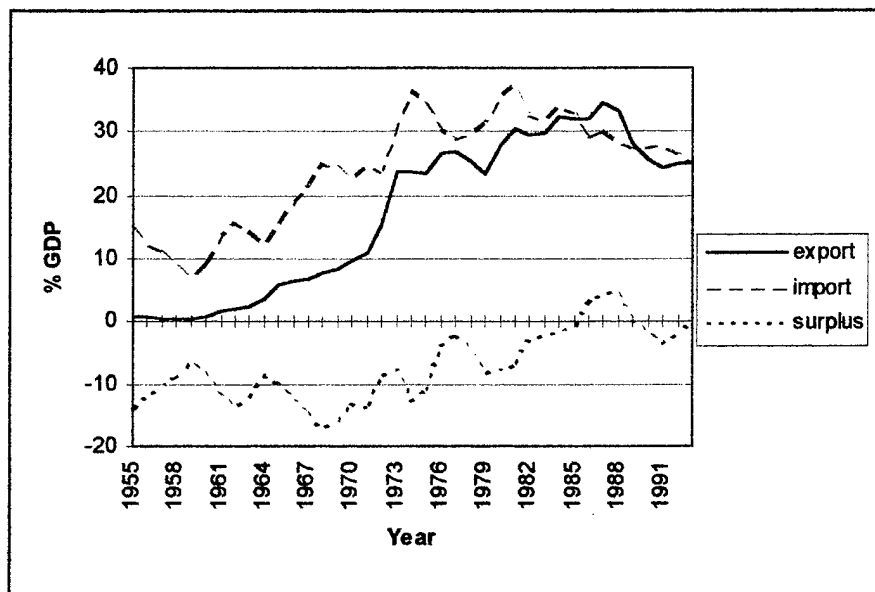


Figure 3.2. Exports, Imports, and Surplus as a percent of the GDP

Source: IMF, International Financial Statistics Yearbook (1984 and 1994)

While it is valid that exports provided the South Korean economy foreign exchange with which to buy investment goods, one vital question still remains. Was the export sector substantial enough to account for the GDP growth? Figure 3.2 presents data which helps to answer this question. During the time period when this exceptional growth started, exports were not very significant when compared with the GDP. It was not until the 1970s that the export-GDP ratio was enough to affect decisively country's economic growth. It suggests that, at least in the early period of the Korean take-off, another source has to be credited for the performance.

Dani Rodrik (1994, p. 2) argues that the export-led growth story "is incomplete and quite misleading in the importance it attaches to the role of export-orientation in the growth performance." He continues by stating that "a much more plausible explanation

for the economic take-off is the sharp increase in investment demand that took place in the early 1960s." It seems, however, that Rodrik's explanation faces the same problem as the export-led argument faces. The investment-GDP ratio, which is the basic argument he presents to defend his idea, was not a significant factor in the early 1960s as well. It is true that investment as a percent of the GDP grew rapidly after 1959, as we can see in Figure 3.3. However, it was only in 1967 that it reached and exceeded the level normally achieved by industrialized countries.

Michell (1988) argues that both exports and the domestic sector contributed to the initial growth. Although exports were not the initial determining factor, a set of policies to encourage exports adopted in 1959 and removal of previous extreme constraints on trade with Japan after the overthrow of Syngman Rhee in April 1960 caused growth in this sector. Most of the initial growth came from domestic sources. In his opinion, the biggest factor causing domestic growth was not so much new investment as the rational use of underutilized existing resources. Following this reasoning he quotes the Korean Economic Planning Board, which in 1965 recognized that "the high growth rate registered, with a relatively small investment ratio, was attributable to the remarkable expansion of agricultural production..., and also to the fact that hitherto idle capacity and surplus labour were more effectively utilized".(p.11)

Table 3.1 presents the contribution of exports and domestic sectors to the growth in GNP. Based on this data, Michell states that "exports alone cannot explain the transition from low to high growth in the 1960s and due weight must be attributed to the domestic market; whereas during the 1970s the degree to which exports were vital to the economy of the Republic of Korea can hardly be exaggerated."

When referring back to Figure 3.2, another issue is raised by the decreasing tendency in both the export-GDP and import-GDP ratios as shown from the late 1980s on. This trend clearly suggests that the South Korean economy has been faced with problems in the international trade market. This issue was addressed by Mark Clifford (1994) in his book "Troubled Tiger". He offers these insights:

South Korea's economic growth had already been extraordinary. But from 1986 to 1988 it underwent a boom of unprecedented magnitude...It was during these three years that business people and

politicians in Tokyo, Washington and Brussels began fretting that Korea would become “another Japan,” running chronic trade and current account surpluses as a result of policies designed to encourage exports and discourage imports. Trade disputes, especially with the United States and Europe, escalated sharply.

Table 3.1. Contribution of Export Growth and Domestic Growth to GNP Growth, 1961-83.

Year	Growth due to		GNP Growth
	Export	Domestic Market	
	%	%	
1961	1.0 (18)	4.6 (82)	5.6
1962	1.1 (50)	1.1 (50)	2.2
1963	1.5 (16)	7.6 (84)	9.1
1964	1.1 (11)	8.5 (89)	9.6
1965	1.9 (33)	3.9 (67)	5.8
1966	1.6 (13)	11.1 (87)	12.7
1967	1.8 (27)	4.8 (73)	6.6
1968	3.0 (27)	8.3 (73)	11.3
1969	3.3 (24)	10.5 (76)	13.8
1970	2.5 (33)	5.1 (67)	7.6
1971	2.7 (29)	6.7 (71)	9.4
1972	6.2 (107)	-0.4 (-7)	5.8
1973	10.4 (70)	4.5 (30)	14.9
1974	1.6 (20)	6.4 (80)	8.0
1975	3.3 (46)	3.8 (54)	7.1
1976	8.6 (57)	6.5 (43)	15.1
1977	4.2 (41)	6.1 (59)	10.3
1978	3.6 (31)	8.0 (69)	11.6
1979	0.1 (2)	6.4 (98)	6.5
1980	3.9 ( )	-9.1 ( )	-5.2
1981	2.1 (34)	4.1 (66)	6.2
1982	4.1 (74)	1.4 (26)	5.5
1983	6.0 (65)	3.3 (35)	9.3

From Michell (1988, p. 30).

These kind of problems can be expected as one economy enlarges and becomes able to influence the international economy. By the late 1980s, South Korea had become a very important exporter in the world scenario. The reaction from other economies, whose producers' interests were threatened by their notable success, was to be expected.

### C. INVESTMENT

An economic expansion is produced by two sources of growth: increase in inputs and increase in output per unit of input. The first is related to labor force and stock of physical capital, while the latter is related to efficiency in the use of these resources. Figure 3.3 captures important points related to this issue in regarding to South Korea's growth. The investment-GDP ratio in South Korea rose from around 10% in the 1950s to 35% in the 1980s. This is by far a superior increase to that achieved by other developing countries. The contrast is even greater and more meaningful when compared with industrialized countries. These nations have consistently maintained their ratio in the range of between 20% and 25%, with a decreasing trend since the mid-1970s.

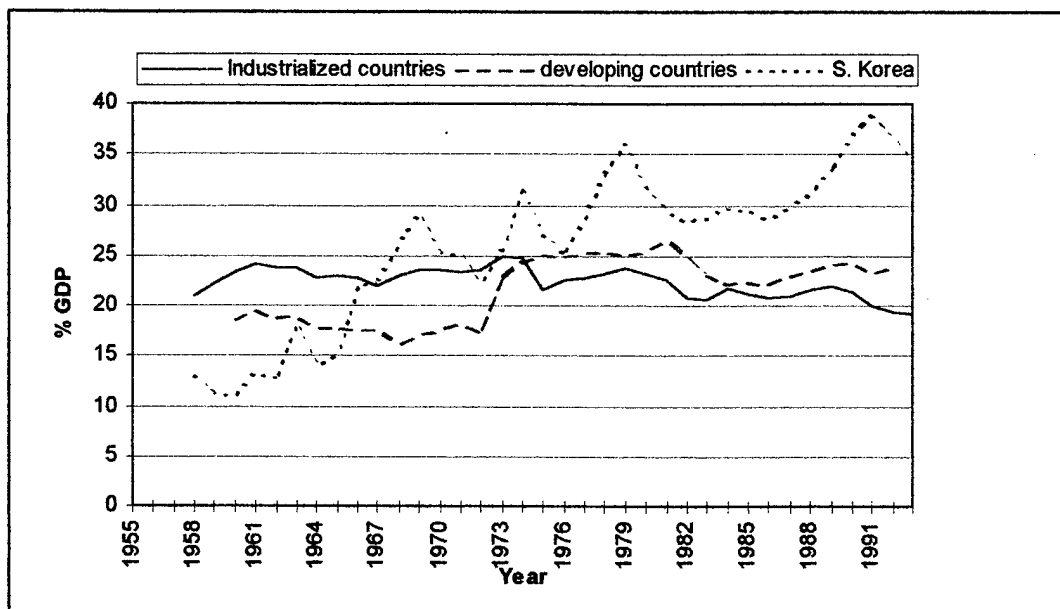


Figure 3.3. Investment as a Percent of the GDP

Source: IMF, International Financial Statistics Yearbook, 1986 and 1994.

These figures suggest that the increase in input largely explains South Korean's growth. On the other hand, the industrialized countries' source of expansion is based on their continuous improvement of the way they use their resources. In fact, it is a powerful argument for economists who see growth in the Asian countries as being a consequence of capital accumulation. The following statement from Paul Krugman (1994) addresses this issue:



The newly industrializing countries of Asia, like the Soviet Union of the 1950s, have achieved rapid growth in large part through an astonishing mobilization of resources. ...Asian growth, like that of the Soviet Union in its high-growth era, seems to be driven by extraordinary growth in inputs like labor and capital rather than by gains in efficiency.

Using the Summers & Heston and OECD data sets, Professor Alwyn Young (1993) explains that “once factor accumulation is taken into account, productivity growth in the economies of the NICs, and in particular in their tradable manufacturing sectors, does not appear to be extraordinary high.” He continues, writing that the NICs’ output growth are “not substantially greater than what one would have predicted, given the doubling, tripling and quadrupling of the investment to GDP ratios in these economies.”

More dramatic are the findings of Professor Laurence Lau and his associate Jong-Il Kim (1994). They analyzed the sources of economic growth of the East Asian NICs using the aggregate “meta-production function” framework, and came to this conclusion:

...the hypothesis that there has been no technical progress during the postwar period cannot be rejected for the four East Asian newly industrialized countries. By far the most important source of economic growth of the East Asian newly industrialized countries is capital accumulation, accounting for between 48 and 72% of their economic growth, in contrast to the case of the Group-of-Five industrialized countries, in which technical progress has played the most important role, accounting for between 46% to 71% of their economic growth.

Is input-driven growth harmful? No, but it is limited because a worker’s capacity to handle inputs is limited. It is impossible for a country to maintain high growth rates for a long period of time without a rise in output per unit of input. This suggests that the outstanding growth achieved by South Korea cannot be sustained indefinitely unless resources are used more and more efficiently. In fact, this argument is consistent with the decreasing trend in GDP and GDP per capita shown in Figure 3.1. These rates have been decreasing since the mid-1980s and indicate that economic growth in South Korea is now slower.

#### **D. FINANCING THE GROWTH**

South Korea's investment as a percent of GDP grew persistently until 1979. Since then, it has fluctuated between 30% and 35%. A question concerning this situation arises: What is the significant source of this investment and for how long will it be available to sustain its high level?

Economic activity can be financed by two main sources: the nation's savings and foreign capital. The latter flows to the economy voluntarily through international investors, as international assistance or borrowed resources. A comfortable situation for an economy is one in which its investment is financed by its own savings. This is not the case for South Korea. All the sources cited above had their individual role in supporting the economy.

Figure 3.4 relates the level of investment to savings. It can be seen that the heavy investments required to sustain South Korea's rapid economic growth have almost always been beyond this country's savings capabilities. For only a short time in the late 1980s, this condition did not occur. It does not mean that savings have been low in this country; rather it reflects an impressive level of investment. In fact, the upward trend in the savings-GDP ratio and the 35% level achieved in the late 1980s are an outstanding mark. This is superior to the level of savings achieved by industrialized countries (about 24% in the 1970s and 20% in the 1980s)<sup>3</sup>.

Since these savings were not able to support South Korean growth, external flow of capital played an important role in the economy. According to Parvez Hasan (1976) "in the early sixties the investment rate of about 12.5% of GDP was financed mainly by resources inflow from abroad, principally in the form of U.S. aid." This monetary assistance, however, was not considerable and it ended in the mid-1970s. This gap was filled by international investors and by borrowing foreign funds.

Borrowing foreign funds has been the major source of capital to fill the investment-savings gap. The external debt grew from a negligible amount in the early 1960s to more than US\$ 47 billion in 1993<sup>4</sup>. Figure 3.5 clarifies the vital role that external

---

<sup>3</sup> Source: IMF, International Financial Statistics Yearbook 1994

<sup>4</sup> Source: Parvez Hasan [Ref. 10], table SA25 and World Bank: World Debt Tables.

debt plays in the South Korean economy. The debt-GDP ratio grew dramatically until 1985 when it reached a level of 50%. From that year on it fell dramatically. In 1989, however, it leveled out, reaching and maintaining a comfortable level of around 14%.

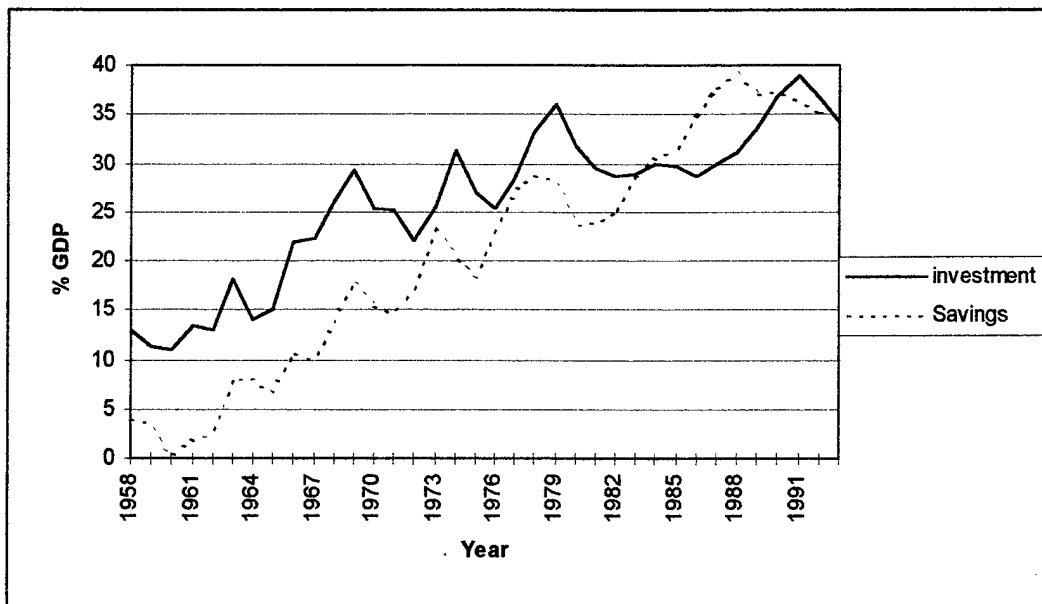


Figure 3.4. Savings and Investment as a Percent of the GDP

Source: IMF, International Financial Statistics Yearbook, 1986 and 1994

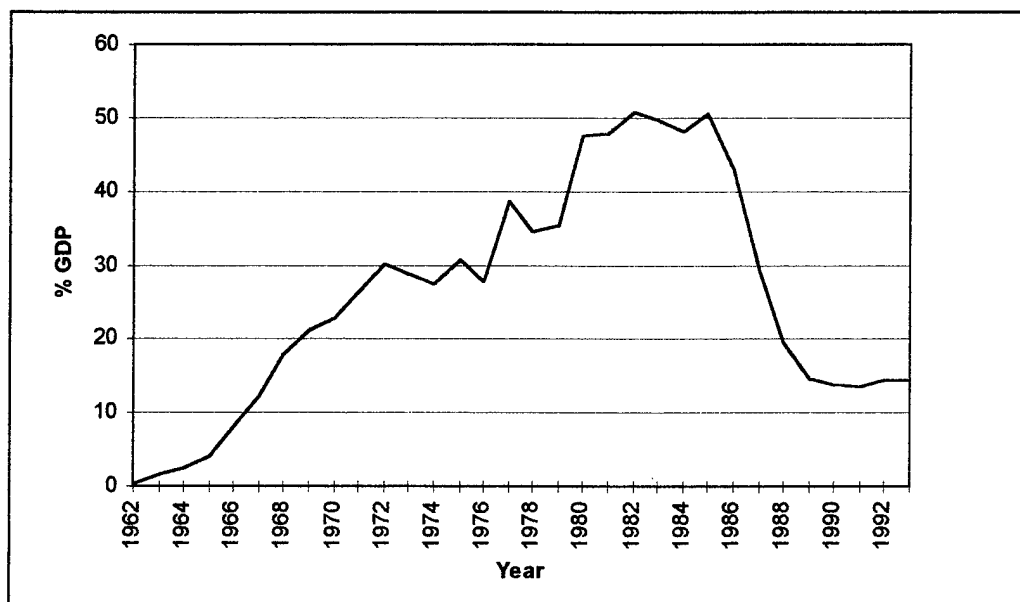


Figure 3.5. External Debt as a Percent of the GDP

Source: World Bank, World Debt Tables 1987 vol. 2, 1988 vol. 3, and 1994 vol 2.  
Parvez Hasan (1976), table SA25.

It is interesting to note the South Korean performance in the late 1980s. There was a surplus in trade, savings exceeded investment, and the debt-GDP ratio fell. Mark Clifford (1994) labels this period "The Big Boom" and "The Second Take-Off." What followed the "Big Boom" period cannot be considered a bad performance. The savings and the investment are almost at the same level. This suggests that the growth can be financed internally. The low 14% external debt-GDP ratio means that, if necessary, South Korea can borrow from abroad to finance further domestic economic growth.



#### IV. EXPLAINING KOREAN ECONOMIC GROWTH

The explanations for the Korean economic growth are presented in the context of the East Asian newly industrialized countries, NICs. The outstanding achievement of these countries has been claimed as supporting evidence by both sides of opposing theories. On one side are those economists who attribute this success to the substantial role played by the state in directing the economy. On the other side are those who interpret this performance as due primarily to the actions and efforts of private individuals in a free market. This chapter presents the context and basic ideas that support each point of view and how they are applied to explain the NICs performance, especially in the case of South Korea.

##### A. THE CONTEXT AND THEORY

The *dirigisme*<sup>1</sup> experienced by the industrialized countries during the Great Depression and wartime provided the basis for the predominant approach to economic policy in the 1950s and 1960s. This approach assigned a significant role in the economy to the state. Economists who supported this approach believed that only the government has the capacity to deal with distortions in the market caused by circumstances called "market failures". According to this view, the market is not able to repair itself when problems occur. These ideas were also taken up by economists dealing with underdeveloped countries. Besides market failures, the special circumstances of these countries, such as low private savings, dependence on primary products exports, small internal markets, limited skills, and few entrepreneurs adept at large-scale organization, were claimed by these economists as justification for an even bigger role for the state than in the more developed countries. In this view, the reliance on a free market would perpetuate the coexistence of precapitalist with capitalist forms of production, condemning them to remain underdeveloped. The government should not only supply public goods but also undertake direct responsibility for establishing a mechanism that

---

<sup>1</sup> *Dirigisme* in the French sense contains the idea of directional thrust, or orienting power, in the hands of government (Petit Larousse 1975).

would guarantee the allocation of resources into productive investments. The substance of this point of view is that the engine of development is capital formation. (Wade, 1990, p. 8)

Notice that this view of market failure differs from the usual market failure idea that economists use to justify government intervention in the economy. According to Gwartney and Stroup, (1992, p. 523), the causes of market failure can be grouped into four general classes: externalities, public goods, poorly informed buyers or sellers, and monopoly.

Cowen (1993, p. 75) states that “externalities occur when one person’s actions affect another person’s well-being and the relevant costs and benefits are not reflected in market price.” Gwartney and Stroup (1992, p. 543), point out how externalities can distort the economy:

When externalities are present, the market may fail to confront decision-makers with the proper incentives. Since decision-makers are not forced to consider external costs, they may find it personally advantageous to undertake an economic activity even though it generates a net loss to the community. In contrast, when external benefits are present, decision-makers may fail to undertake economic action that would generate a net social gain.

In the original formulation by Paul Samuelson, there are two distinctive characteristics of public goods. First, the availability of a public good to one person makes it equally available to all others. Second, because of this joint consumption, it may be impossible to exclude nonpayers from the receipt of a public good. (Gwartney and Stroup, 1992, p. 537) As a consequence of its characteristics, the public good may cause a distortion in the market:

When it is costly or impossible to withhold a public good from persons who do not or will not help pay for it, the market system breaks down because everyone has an incentive to become a free rider. When everyone attempts to ride for free, production of the public good will be lower than the socially ideal level. (Gwartney and Stroup, 1992, p. 544)

Poor information poses another challenge to the market, thereby causing the market mechanism to weaken.

Consumers do not have perfect knowledge about the quality of a product, the price of alternative products, or side effects that may result from a product. They may make incorrect decisions, decisions they will later regret....When this is the case, business entrepreneurs have a strong incentive to cut costs by reducing quality. (Gwartney and Stroup, 1992, p. 539)

The argument that a monopoly causes distortions in the market is cited by Stigler (1993, p. 400):

...the purely “economic” case against monopoly is that it reduces aggregate economic welfare (as opposed to simply making some people worse off and others better off by an equal amount). When the monopolist raises prices above the competitive level in order to reap his monopoly profits, customers buy less of the product, less is produced, and society as a whole is worse off. In short, monopoly reduces society’s income.

According to Wade (1992, p. 9), “the late 1960s and early 1970s saw a downgrading of the role of the state in both developed and less developed countries”. In the context of the less developed countries (LDCs), he lists three examples of evidence presented by economists at that time:

1. the use of the state to promote import-substituting industrialization during the 1950s and the 1960s had resulted in inefficient industries requiring permanent subsidization, with little prospect of achieving international competitiveness.
2. extensive government intervention tended to generate “rent-seeking” on a significant scale, that is, to divert the energies of economic agents away from production and into lobbying for increased allocations of government subsidies and protection.
3. some of the most successful LDCs, including Taiwan, South Korea, Hong Kong, and Singapore, had achieved extraordinary industrial growth by using an outward-oriented model driven by market incentives and a strong private sector.

Even the previously accepted idea of government intervention in the case of market failure began to be challenged. The idea of “government failure” as being as pervasive as market failure, if not more so, began to gain importance. Some economists believed that



such failure, indeed, was an inherent tendency of all governments. Shaw (1993, p. 150) defines this concept:

In the past many economists have argued that the way to rein in “market failures” such as monopolies is to introduce government action. But public choice economists point out that there also is such a thing as “government failure.” That is, there are reasons why government intervention does not achieve the desired effect.

The idea of government failure is the same as market failure. Although individuals acting in the political marketplace have some concern for others, their motive, in fact, is self-interest. This can cause distortions in the market the same way as individuals do.

These circumstances caused the current theories about development policies to shift from the prescriptions of the 1950s and 1960s toward a “neoclassical” view of the appropriate role of the government. According to this view, the government’s role is to provide institutional arrangements that enable the market to operate. Once these arrangements are in place the market can take care of itself and allocate resources efficiently. This efficient allocation of resources, not capital formation, is the engine of development. What drives the economy to its maximum production potential is the profit incentives, with prices reflecting the scarcity of resources. Hence, government should allow private producers to operate through market mechanisms. It should function only as the supplier of those goods and services where it has clear comparative advantage, namely public goods and services. Wade (1990, p. 11) explains the key development policy according to the neoclassical approach:

The key development policy is therefore an outward-oriented trade regime, characterized by low or negligible impediments to imports, relatively uniform incentives for different production activities, and incentives for export sale equal to the incentives for domestic market sale. These conditions will maximize the economy’s income and growth (in world prices) by concentrating resources on those activities in which the economy has a comparative advantage, leading other forms of production to other nations. In addition, by expanding the proportion of the economy which is directly subject to international competitive pressures, the government’s own ability to impose “political” prices is weakened; hence producers’ uncertainty about government policy is reduced.

This approach is supported by two main concepts: profit incentives and comparative advantage. The idea that profit incentives lead individuals to allocate their resources on activities that also promote the economic well-being of the society is expressed in the Invisible Hand Principle by Adam Smith (1976, p. 477):

...every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its product may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was not part of his intention. Nor is always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it.

The comparative advantage concept explains why mutual gains arise from trade and specialization. A nation or individual has comparative advantage in the production of a good when its production costs are low compared to the production costs of other goods. According to this law, trading partners are better off if they specialize in the production of goods for which they are a low opportunity cost producer and trade for those goods for which they are a high opportunity cost producer. Specialization in the area of one's comparative advantage minimizes the cost of production and leads to maximum joint output. (Gwartney and Stroup, 1992, p. 416)

## **B. EXPLANATIONS FOR THE EAST ASIAN SUCCESS**

The two approaches stated above form the foundation for three main explanations of the East Asians NICs performance: The Free Market theory, the Simulated Free Market theory and the Governed Market theory. The first two rely on the neoclassical point of view, while the third depends on interventionist ideas.

### **1. Free Market (FM) Theory**

The views of those who claim that the NICs' success is due to a free market are summarized by Wade (1990, p. 4):

There are those who hold that East Asian economic success is to be ascribed to economic openness and small government. With internal prices reflecting real scarcities and the state kept firmly in its place, resources flowed to their most efficient uses. The limitations of small domestic markets were overcome by exporting manufactured goods at competitive prices. In contrast, countries which adopted more inward-looking strategies based on the domestic market have stagnated, partly because of small market size and partly because the regulations needed to support the strategy choked the initiative of private businesspeople, depriving them of the stimulus of competition and misdirecting their remaining energies into lobbying and other socially unproductive activities.

There is abundant literature attributing the success of the five NICs to their reliance on free market. Edward Chen (1979, p. 41) asserts that "state intervention is largely absent. What the state provided is simply a suitable environment for the entrepreneurs to perform their functions." According to this author, the NICs' performance demonstrates that "the free market environment provides the necessary mechanism to gear the economies towards their optimal points on the production possibilities frontier"(1979, p. 185). A slightly different argument is presented by John Fei (1983, p. 34). He states that "the basic causation of success of the East Asian NICs on the policy front, can be traced to the lessening of government interference in the market economy during the E-O [Export-Oriented] phase." He continues, "in Taiwan and Korea, interference with the market was considerably less as compared to other worse offenders in the near NICs and the Latin American countries..."

Two main types of evidence are presented to support the free market theory. One is the cross-sectional study of the relationship between inward and outward trade orientation, on the one hand, and growth on the other. The other is the correlation between price distortions and economic growth. Both these studies focus on the main arguments of the free market theory, namely, that trade is a way of exploring comparative advantage and price is the indicator for the efficient allocation of resources.

A study made by the World Bank and subsequently publicized in the 1987 World Development Report shows the relationship between growth and trade orientation. According to the World Bank, an outward-oriented strategy is one in which trade and

industrial policies do not discriminate between production for the domestic market and exports, nor between purchases of domestic goods and foreign goods. In contrast, an inward-oriented strategy is one in which trade and industrial incentives are biased in favor of production for the domestic over the export market. This approach is known as import substitution. (World Bank, 1987, p. 78)

Forty-one developing countries were classified according to their trade orientation strategies which were adopted in two periods, from 1963 to 1973 and from 1973 to 1985. The countries' strategies were classified by combining four indicators: effective rate of protection for domestic market, use of direct controls such as quotas and import-licensing schemes, use of export incentives, and degree of exchange rate overvaluation. These criteria were used to classify the countries into strongly outward-oriented, moderately outward-oriented, moderately inward-oriented, and strongly inward-oriented economies. Then, the groups were plotted against some economic indicators. The results support the neoclassical position. Economic performance of the outward-oriented economies has been broadly superior to that of the inward-oriented economies in almost all respects, according to the study.

Figure 4.1, 4.2, 4.3, and 4.4 present the economic performance of the forty-one countries for two of these indicators: the growth in real GDP and in real GNP per capita. During both periods, there is a clear descending pattern from strongly outward-oriented to the strongly inward-oriented economies. Singapore, South Korea and Hong Kong enjoy the best performance and are strongly outward-oriented, according to the study's criteria.

The neoclassical argument says that price distortions can influence economic growth. The higher the price distortion is, the greater the adverse effect on growth. The World Bank studied the extent of price distortions in developing countries in the 1970s and their impact on growth. Its conclusion, publicized in the 1983 World Development Report, is that during the 1970s "price distortions were serious in many developing countries" and "those countries with the worst distortions experienced significantly lower domestic saving and lower output per unit of investment, thus leading to slower growth." (1983, p. 57)

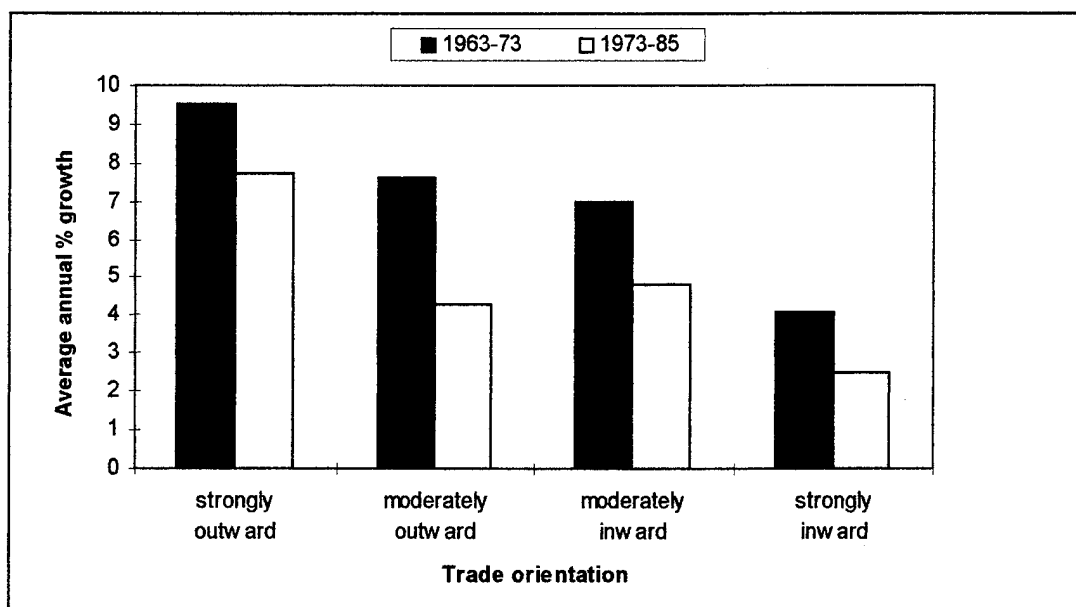


Figure 4.1. Real GDP Growth for Groups of Countries with Different Trade Orientation

Source: From World Development Report 1987, pg. 84.

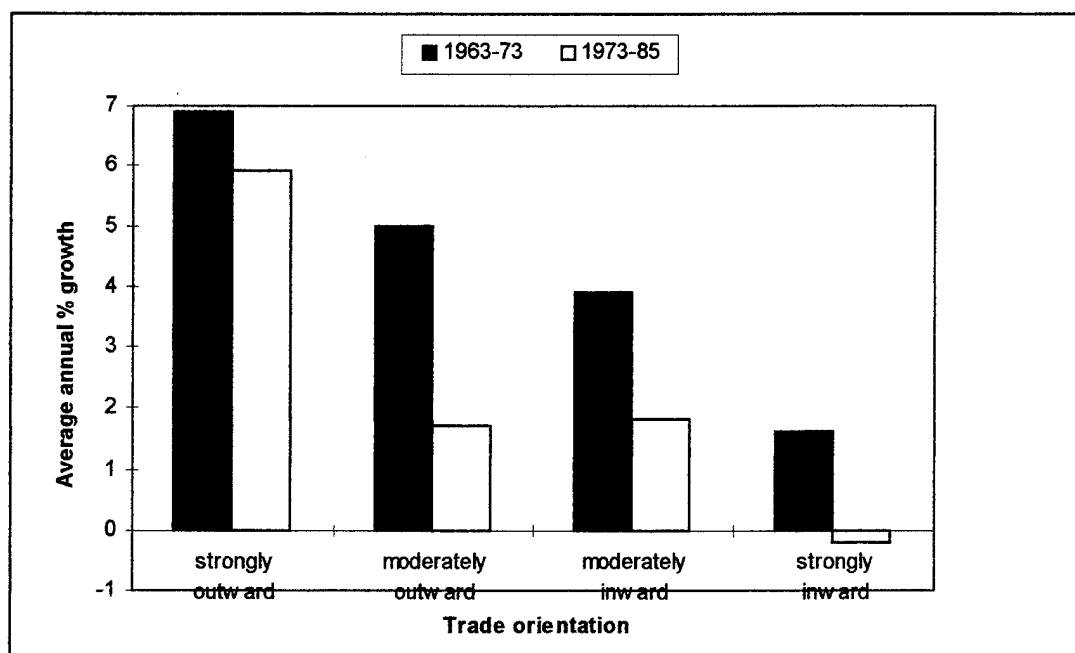


Figure 4.2. Real GNP per Capita Growth for Groups of Countries with Different Trade Orientation

Source: From World Development Report 1987, pg. 84.

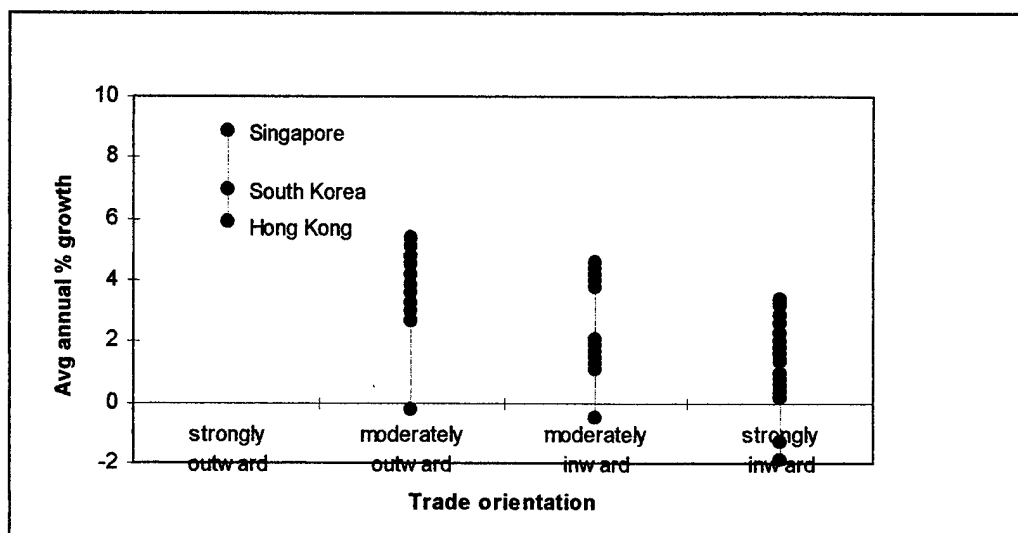


Figure 4.3. Real GNP per Capita Growth for Countries with Different Trade Orientation, 1963-73

Source: From World Development Report 1987, pg. 86.

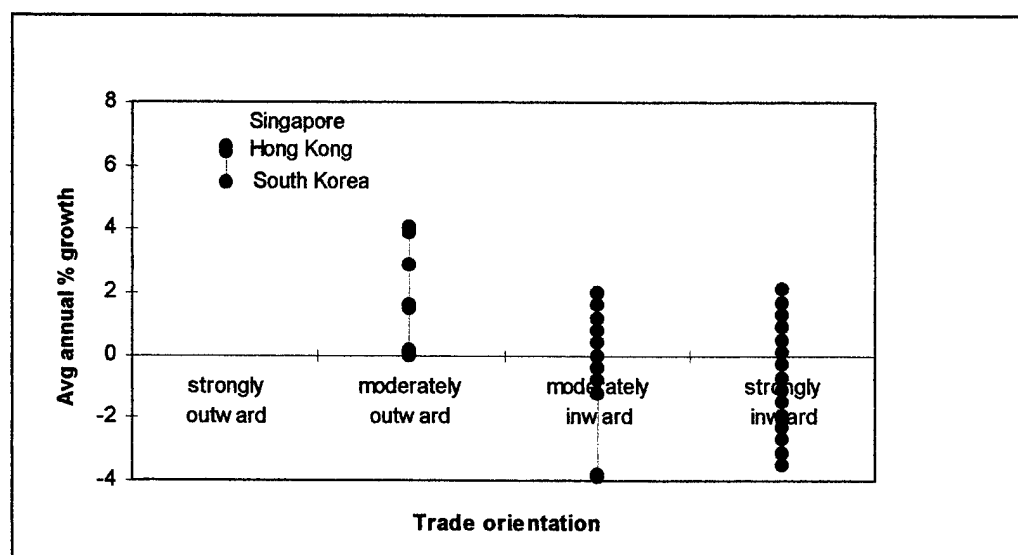


Figure 4.4. Real GNP per Capita Growth for Countries with Different Trade Orientation, 1973-85

Source: From World Development Report 1987, pg. 86.

The average growth rate for the ten countries with low distortions was 7 percent. This was 2 percentage points higher than the average for the sample. On the other hand, the ten countries with high distortions had growth rates that were on average 2 percentage points lower than the average for the whole sample. (1983, p. 61) Figure 4.5

presents the World Bank's findings. South Korea had the fourth-best mark on the distortion index and the best performance in terms of growth.

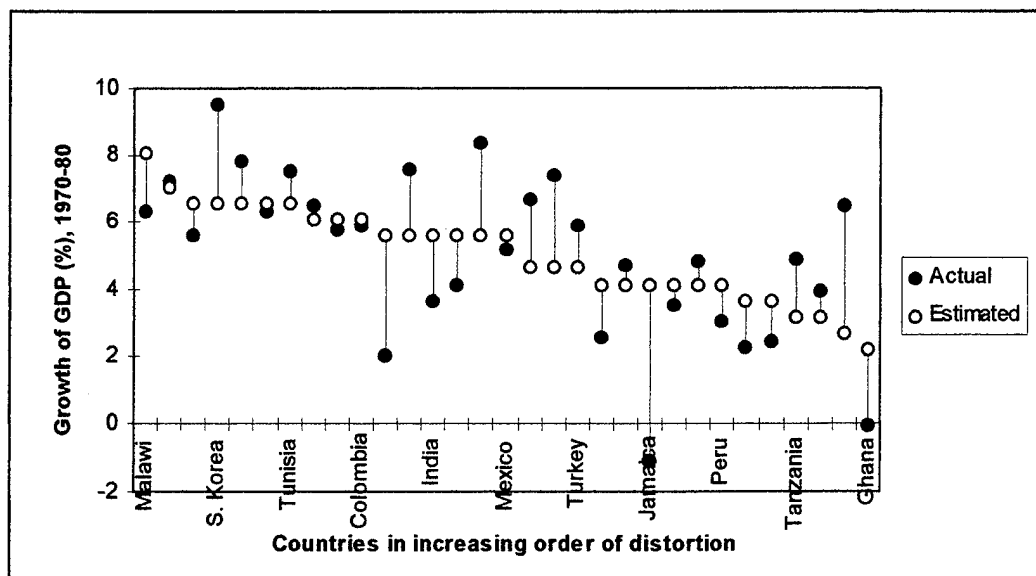


Figure 4.5. Price Distortion and Economic Growth

Source: After World Development Report 1983, pg. 62.

## 2. Simulated Free Market (SM) Theory

Some neoclassical economists maintain that the government's intervention was an important factor in the NICs development. But, in their opinion, this was only insofar as it promoted exports and offset market failures. Wade (1990, p. 24) captures the main point of this theory:

This simulated free market (SM) theory differs from the FM theory in terms of the distinction between a free (or liberal) trade regime and a neutral trade regime....the latter is one where any incentive for domestic producers to sell on the domestic market rather than export, because of protection, is offset by export subsidies....So a neutral trade regime may go with some government intervention, including protection of the domestic market. The important point....is that the incentive effect of such protection in biasing sales toward the domestic market should be offset, in aggregate, by export promotion measures. The Far Eastern countries have managed to do this, according to Bhagwati, which is a large part of the reason why they have been so successful compared to others which have not.

Frederick Berger (1979, p. 64) expresses his belief "that the crux of the Korean example is that the active interventionist attitude of the State has been aimed at applying moderate incentives which are very close to the relative prices of products and factors that would prevail in a situation of free trade." Wade (1990, p. 23) refers to the argument posed by Jagdish Bhagwati in favor of the export promotion (EP) strategy, which is in accordance with simulated free market theory.

An EP strategy is a set of policies which results in the average effective exchange rate for importables being approximately equal to that for exportables. The most important thing the government of an underdeveloped country can do to promote growth, he implies, is to maintain an EP strategy, and this requires government intervention.

It is important not to confuse the idea of simulated free market with import substitution. While the former implies trade neutrality, not the deliberate promotion of one sector over another, the latter discourages imports, and hence indirectly discourages exports, in an effort to protect the domestic market.

In "The Third World Survey" (The Economist, September, 1989), Clive Crook states that South Korea built "a complicated system of interventions that broadly offset each other in their impact on trade (p. 6). This argument fits the simulated free market model. Regarding the impact of this intervention on price, writes Crook, South Korea "intervened, but in ways that left prices comparatively free to do their resource-allocating job" (p. 35).

### **3. Governed Market (GM) Theory**

The governed market hypothesis was formulated by Wade (1990) in his book Governing the Market. Previous to his conclusions, however, were those economists whose theories stressed the importance of government action in implementing the institutions of capitalism in a more effective way than the methods of implementation of a free market economy. Critics who make this government-leadership argument state that the principal factor behind the East Asian success is government intervention. Parvez Hasan (1976, p. 29), draws attention to an apparent paradox in the Korean economy:

...the economy depends in large measure on private enterprise operating under highly centralized government guidance. In Korea the



...the economy depends in large measure on private enterprise operating under highly centralized government guidance. In Korea the government's role is considerably more direct than that of merely setting the broad rules of the game and influencing the economy indirectly through market forces. In fact, the government seems to be a participant and often the determining influence in nearly all business decisions. This arrangement is generally acceptable to the private sector presumably because the success of business enterprises depends on government protection and support in various forms, including in some instances substantial subsidies.

Edward Mason and associates (1980, p. 254) draw a similar conclusion about business-government relations in South Korea:

The rapid economic growth that began in South Korea in the early 1960s and has accelerated since then has been a government-directed development in which the principal engine has been private enterprise. The relationship between a government committed to a central direction of economic development and a highly dynamic private sector that confronts the planning machinery with a continually changing structure of economic activities presents a set of interconnections difficult to penetrate and describe. Planning in South Korea, if it is interpreted to include not only policy formulation but also the techniques of policy implementation, is substantially more than indicative. The hand of government reaches down rather far into the activities of individual firms with its manipulation of incentives and disincentives. At the same time, the situation can in no sense be described in terms of a command economy.

Wade attempted to propose a theory built on some ideas that could provide a basis from which economic analysis could be done and logical conclusions could be drawn. He states the basic ideas behind his theory (1990, p. 26):

The governed market (GM) theory says that the superiority of East Asian economic performance is due in large measure to a combination of: (1) very high levels of productive investment, making for fast transfer of newer techniques into actual production; (2) more investment in certain key industries than would have occurred in the absence of government intervention; and (3) exposure of many industries to international competition, in foreign markets if not at home. These are the proximate causes. At a second level of causation, they are themselves the result, in important degree, of a set of government economic policies. Using incentives, controls, and mechanisms to spread risk, these policies enabled the government to guide, or govern, market processes of resource allocation so as to produce different production and investment outcomes

than would have occurred with either free market or simulated free market policies. At the third level of explanation, the policies have been permitted or supported by a certain kind of organization of the state and the private sector.

The kind of organization of the state that the author mentions is, for the East Asian countries, authoritarian and corporatist. The first refers to the regulations by which rulers are chosen. Authoritarian means that the rulers "are selected by methods which give relatively little scope for the expression of popular sentiment." The second refers to relations between special interest groups and the state. "In corporatist systems the state charters or creates a small number of interest groups, giving them a monopoly of representation of occupational interests in return for which it claims the right to monitor them in order to discourage the expression of 'narrow', conflictful demands." (Wade, 1990, p. 27) The author continues:

The corporatist and authoritarian political arrangements of East Asia have provided the basis for market guidance. Market guidance was effected by augmenting the supply of investible resources, spreading or "socializing" the risks attached to long-term investment, and steering the allocation of investment by methods which combine government and entrepreneurial preferences. In particular, the governments guided the market by: (1) redistributing agricultural land in the early postwar period; (2) controlling the financial system and making private financial capital subordinate to industrial capital; (3) maintaining stability in some of the main economic parameters that affect the viability of long-term investment, especially the exchange rate, the interest rate, and the general price level; (4) modulating the impact of foreign competition in the domestic economy and prioritizing the use of scarce foreign exchange; (5) promoting exports; (6) promoting technology acquisition from multinational companies and building a national technology system; and (7) assisting particular industries. (Wade, 1990, p. 27-28)

It is useful to summarize the main differences between the GM theory and the FM and SM theories as a conclusion of this chapter. Wade's words will be used to make this summary:

The FM and SM theories emphasize efficient resource allocation as the principal general force for growth, and therefore interpret superior East Asian performance as the result of more efficient resource allocation than in the other LDCs or NICs. This more efficient resource allocation comes from more freely functioning markets, including closer integration

of domestic product markets into international markets. Hence these countries show the virtues of “getting the prices right,” where “right” means domestic prices in line with international prices. The GM theory, on the other hand, emphasizes capital accumulation as the principal general force for growth, and interprets superior East Asian performance as the result of a level and composition of investment different from what FM or SM policies would have produced, and different, too, from what the “interventionist” economic policies pursued by many other LDCs would have produced. Government policies deliberately got some prices “wrong,” so as to change the signals to which decentralized market agents responded, and also used nonprice means to alter the behavior of market agents. The resulting high level of investment generated fast turnover of machinery, and hence fast transfer of newer technology into actual production. (1990, p. 29)

The analysis of the main policies adopted by the government, the response of the private sector, and the relation of these roles to the results obtained by South Korea in terms of economic growth can give the arguments to decide with side is right or close to being right. This is the scope of the next chapter.

## **V. THE ROLE OF THE GOVERNMENT AND THE PRIVATE MARKET**

As discussed in Chapter II, there is no economy that is totally free market. Some degree of government intervention is expected. In South Korea, however, the government has been interventionist. This fact is generally recognized by economists, no matter what economic current of thinking they defend. This means that the role played by the government in the economy exceeds what is expected and tolerated by those who defend the free market as a way to achieve development. For those who defend government intervention, however, the result achieved by South Korea is an indication of the superiority of this approach when dealing with developing countries. This chapter is a discussion of the main policies adopted by the South Korean government, the response of the private sector, and the relation of these roles to relevant results in terms of growth.

### **A. ANTECEDENTS OF THE HIGH-GROWTH PERIOD**

Under the Rhee government of the 1950s, Korean policy was preoccupied by largely political considerations, and the government attached no particular importance to either economic growth or exports (Jones and Sakong, 1979, 272-273). Rhee's primary goal was reunification and he even talked of a "march north" to enforce his priority (Woronoff, 1992, p. 95). Because of this, the government failed to take actions to improve the economic situation which was seriously damaged by the Korean War. The government resumed the policy of import substitution that was begun after the World War II. Under an import substitution strategy, domestic production replaces imports of non-durable consumer goods. Imports of these goods are discouraged through a set of restrictions. Korea's system of import restrictions created a bias against exports, with overvaluation of the exchange rate deterring exports, even though the government had a program of export subsidies. It also created a scarcity of foreign exchange. With a reduced volume of exports, the main source of foreign exchange was American aid. This situation of scarcity gave rise to rent-seeking activities with corruption as a consequence, leading to a distrust of the government. (Kwon, 1990, p. 34)

Despite this discouraging picture, some promising developments took place in the 1950s. Several projects were undertaken that led industrial production to grow at over 10 percent per year. These projects, however, were taken at the expense of the agricultural sector which was thrown into a depression with food prices reduced below the cost of domestic production. As agriculture accounted for over 40 percent of GNP and employed over 60 percent of the labour force, the result was to reduce the growth of GNP to the point where it was overtaken by population growth. Land reform had been completed and the long-standing problem of rural unrest was solved. Only unfavorable pricing policies prevented peasants from investing in their own land. There was a rise in demand for education at all levels. Illiteracy dropped from 78 percent in 1945 to 27.9 percent in 1960. (Michell, 1988, p. 10-11)

After 1958, export incentives were increased. Subsidized credit was made available to exporters for up to 75 percent of their production costs in 1959 (Rodrik, 1994, p. 6). In 1961, the civilian government, which was established in 1960, adopted a liberalization philosophy. The exchange rate was depreciated from 50 won to the dollar in January 1960 to 130 won to the dollar in February 1961. At the same time, the multiple exchange rate system was replaced with a single, unified, floating exchange rate system, import controls were liberalized, and subsidies were provided to exports (Balassa, 1990, p. 4). The effect of these measures was not yet felt when a military coup led President Park into power.

## **B. THE PERIOD OF RAPID GROWTH (1960s AND 1970s)**

Jones and Sakong (1979) argue that under Syngman Rhee the Republic of Korea was a “soft” state, but it subsequently turned into a “hard” state. This term “hard state” means that the policies decided by the government are enforced, with obligations placed on people. On the other hand, in a “soft state”, the policies decided are often not enforced, if they are enacted at all. In fact, the Korean constitution provided for the state’s role in the economy. It declares that “The state shall regulate and co-ordinate economic affairs within the limits necessary for the realization of social justice and for the development of a balanced national economy to fulfill the basic living requirements

of all citizens.” Furthermore all mines and important resources were to be owned by the state while the state “shall encourage the foreign trade, and shall regulate and co-ordinate it.” (1949 Constitution, Chapter 4, articles 111-118)<sup>1</sup>

As Myrdal (1968, p. 66) said, “Even an authoritarian regime cannot record major achievement unless it can somehow mobilize acceptance, participation and co-operation amongst the people.” General Park Chung Hee’s measures, adopted after the military coup on May 16, 1961, could not have been successful if he had not worked in a favorable environment. Rather than military or political goals, he made economic advancement the top priority. This was what the population wanted the most. In South Korea there was an overriding impression of business as shady affair. Businessmen who grew rich were assumed to be corrupt. After the military coup, the most visible ones were arrested and their fortunes confiscated. These actions helped the new government to get credibility, and carry out its first five-year plan.

According to Mark Clifford (1994, p. 49) “the men who framed policy in Korea in 1961 after Park took power made no secret of their belief that the country was not ready for a free market system.” He transcribes this statement from the first five-year economic development plan, which translates this belief: “Throughout the plan period, the economic system will be a form of ‘guided capitalism,’ in which the principle of free enterprise and respect for the freedom and initiative of free enterprise will be observed, but in which the government will either directly participate in or indirectly render guidance to the basic industries and other important fields.”

The traditional Confucian economic thought regards agriculture as the basis of a nation’s strength. Reflecting this belief, in June 1961, the military government enacted a Farm Products Prices Maintenance Law in order to maintain prices of agricultural products and to ensure the stability of this sector of the economy. The agricultural policies of the 1950s were reversed. At that time the agricultural prices were held down below the cost of production. A system of rural credit was created, which merged the agricultural co-operatives with the Agricultural Bank. In the first year after the merger 138 million dollars were lent to farmers permitting them to pay old debts and make new

---

<sup>1</sup> The wording remained unchanged through the revisions of 1962 and 1969.

investments. As a result, between 1962 and 1965 agricultural output increased at an annual average rate of 8.8 per cent. (Michell, 1988, p. 31) This reinforced the explanation given by the Economic Planning Board about the contribution of agriculture for the earlier years of high growth. This point was addressed in chapter III, section B.

The economic growth in South Korea has been the result of an interplay between the government and the private market. The government was responsible for setting the rules and influencing decision making in the private sector in line with its view of an appropriate economic policy. The private sector responded to the economic climate generated, taking advantage of the incentives provided by the government, and pursuing the most benefit for its enterprises. The principal aspects of this relationship, and their impact on the economic growth will now be presented.

### **1. Public Enterprises**

In a free market economy, the government is expected to provide only those goods and services where it has clear comparative advantage, namely public goods and services. It is common in developing countries to add more commercial and financial tasks to the government's duties. Jon Woronoff (1992, p. 98) says that Korea "undertook all this and more." He continues: "[T]o accomplish these functions, the government established over twenty special corporations,...There were housing and highway agencies, a telecommunications authority, tourism and trade promotion bodies, and several banks." An explanation for this encroachment on the private sector, in Woronoff's words could be "a lack of capital or managerial ability among existing businessmen, especially in earlier years."

This explanation, however, is based on two questionable assumptions: first, the new business opportunities had to be carried out by existing businessmen and second, the government had more expertise than the private sector. It is also inconsistent with the level of education that South Korea had at that time. Michell (1988, p. 90) states that the government used public enterprises to seek economies of scale. In his view "the government not only planned and guided, but actually created growth." He presents data showing that "public enterprises contributed just over 12 percent of value-added in

manufacturing throughout the 1960s.”(p.91) Jones and Sakong (1980) point that these enterprises were established “particularly in basic industries characterized by a high degree of linkages and scale economies.” For them “the public sector fulfilled the classic role of a leading sector, in which above-average growth stimulates the rest of the economy.” They argue that this sector in South Korea was “relatively efficient by international standards.”

In spite of this relative success, Woronoff (1992, p. 99) describes some consequences of this approach, which in fact would be expected:

...although some of these operations were well run, it was hard to avoid a bureaucratization that stifled initiative and masked profitability. Some cases became so acute that the corporations had to be wound down or sold off while others were subsidized. Thus, in later years, planners definitely preferred leaving productive ventures to private entrepreneurs and there was mounting interest in privatization of existing state enterprises. With this, the trend which had led to a rather large public sector was reversed.

## **2. The Financial Sector**

One decisive instrument used by the government to carry out its plans was the financial system. Growth in South Korea was sustained largely at the expense of repressing the financial institutions and their development. The main strategy was to ensure loans at a low rate of interest for entrepreneurs that were willing to take on activities considered strategic by the government. Cho (1990, p. 227) states that “the Korean government was very reluctant to leave the determination of interest rates and resource allocation to the market function.”

After the military coup, President Park quickly seized control of this system. According to Michell (1988, p. 67), “in 1970 the government directly controlled 96.4 percent of financial assets; this proportion had decreased to 84.4 percent in 1978 and 82 percent in 1980.” Even the commercial banks had their interest rates controlled directly, and most made funds available according to the government order. As Mark Clifford states “the funds that business needed to expand were available only through the state-owned banks, and for the next twenty years the government approved every significant



loan that was made.” With the government controlling the banks, it was easier to obtain credit for projects in sectors regarded as “strategic” in the government’s plans, usually at exceptionally low interest rates.

Kwon (1990, p.36) tells that “very early on, political leaders in Korea saw the potential of private business as an engine of economic growth.” Likewise, “business saw in government a primary source of scarce capital that it badly needed.” In fact it was a marriage of convenience. Kim (1990, p. 191) points out that in fact there was a tripartite relationship between government, business, and financial institutions. The objective of the enterprises was growth maximization rather than profit maximization. The goal was to achieve a minimum size, at which the government would be unable to allow bankruptcy. The government was the referee. The banks simply responded to the government’s commands. As Kim concludes “a natural and inevitable consequence of this tripartite relationship was the increase in insolvent firms or nonperforming assets on the balance sheets of the banks.”

In 1965, following recommendations of the U.S. aid mission report written by Gurley, Patrick, and Shaw, a major interest rate reform was implemented. The maximum rate of interest on time deposits was doubled and bank loan rates were also raised. The objective of this reform was to stimulate the growth of the financial system, and through this, to contribute to growth in output. In the early 1970s, however, the government went back to a low-interest-rate policy. Throughout the 1970s, the real interest rates of bank loans and deposits fluctuated around zero.(Cho, 1990, p.227)

This policy permitted the government to guide the allocation of resources toward its targeted activities. But, it also had secondary effects. Not surprisingly, the black market flourished and became one major source of capital. Mark Clifford (1994, p. 103) says that the size of this market was “more than one-third the size of the official loan market.” Another effect is the socialization of risks. It is clear that someone had to pay for the cheap credit made available to targeted sectors. Clifford (1994, p. 62) remarks that in 1965, when the interest rate reform was adopted, “the interest rates were doubled on savings accounts, to as much as 30 percent for one-year deposits.” At the same time, he continues “bank loan rates were raised, but only to a maximum of 26 percent.” At first

glance, it seems that the banks were losing money on every loan. However, as Clifford continues "the Bank of Korea made up the negative interest rate spread to banks through other concessions." One of these "concessions" was pointed out by Kim (1990, p. 190) when he remarks that "to make up for losses to the banks due to inverted rates, interest at the rate of 3.5 per annum was paid to banks on reserve deposits with the central bank."

In fact, the government distorted the allocation of resources by changing the parameters for the analysis of investments. The expected net present value on projects was increased by cheap credit that did not reflect the opportunity cost of money. Ensuring loans to selected industries regardless of their financial performance, the perceived risk of investment was changed. In fact, this risk was assumed by the government. This shift in liability encouraged firms to undertake projects that they otherwise would have declined.

Cho(1990, p. 234) points out that the financial control in South Korea led to an economic concentration and had a negative effect on income distribution. He says "if the cost of bank credit is set below the real rate of return of capital investment, borrowing from a bank entails rent." Most rent go to the privileged borrowers. Once they were able to secure a continuous flow of credit, they could grow faster than otherwise, leaving competitors way behind. That was one reason why privileged firms in South Korea grew fast and became big. Since the rate on deposit was set below market value, it worked as a tax for the depositor and a subsidy for the borrower. This means that a transfer of income from depositors to firms occurred. Cho continues "it also induces the method of production in a more capital-intensive way and tends to reduce the wage share of the total output of the economy."

### **3. Business Concentration**

Another consequence of the relationship among government, banks, and business was the rise in big business conglomerates. In the earlier days of rapid economic development, the government favored big business by placing resources in the hands of those entrepreneurs who had demonstrated their competitiveness in the international arena (Kwon, 1990, p. 41). This policy of backing winners led to the emergence of large

groups. Lee(1990, p. 330) points out that “the government bailout practices substantially reduced the downside risk of business ventures and thus encouraged entrepreneurs to launch high-risk, high-return, large-scale projects, which contributed greatly to the emergence of big business conglomerates in Korea.” According to Lee, (1990, p.42) the market share of the top five *jaebuls* (as these businesses were called) in terms of sales in manufacturing was 15.7 percent in 1978, increasing to 23 percent in 1985.

Although business concentration facilitated the government’s role in directing credit to targeted economic activities, undesirable effects came from this situation. As these firms had easy access to credit, they had high financial leverage. Kwon (1990, p.41) points out that “from 1984 through 1986, more than one third of the largest 10 percent of the firms listed with the Korean Stock Exchange had equity ratios<sup>2</sup> below 5 percent.” As he states, this “tends to diminish the resilience of an economy in the face of adverse economic shock.” Another consequence pointed out by Kwon is the concentration of land ownership. Approximately 65.2 percent of the private land is now owned by the top 5 percent in income (p. 42).

As the Korean economy became dominated by a relatively small number of big firms, the lack of internal competition emerged. The interaction between big business and government means a mix of business and politics. The firms attained a high degree of autonomy and political power in this process. In “The Third World Survey” (The Economist, 1989, p. 39), the journalist refers to this problem:

A recent report from South Korea’s Presidential Commission on Economic Restructuring measured the extent of competition in the country’s markets for more than 2,500 goods. It said that 21% of these markets were run by monopolies and 57% by oligopolies....The recent wave of strikes for higher wages,...is widely seen as a political struggle for shares of the national income, with the government on one side and workers on the other.

#### **4. The Export-Oriented Strategy**

“The adjective [sic] ‘miracle’ applies comfortably to Korea’s trade record” (Petri 1990, p. 53). This statement helps in understanding how important trade is in South

---

<sup>2</sup> The equity ratios are the ratio of average equity to total value (equity plus debt).

Korea's development. Figure 5.1 shows the distribution of export growth rates over the 1965-86 period for all countries for which data was available. Korean exports grew at 23.1% per annum, more rapidly than in any other country. In less than three decades, Korea transformed an internationally dependent, nonindustrial economy into the world's twelfth largest trading power. This achievement justifies the importance credited to the outward-oriented strategy in the process of Korea's development.

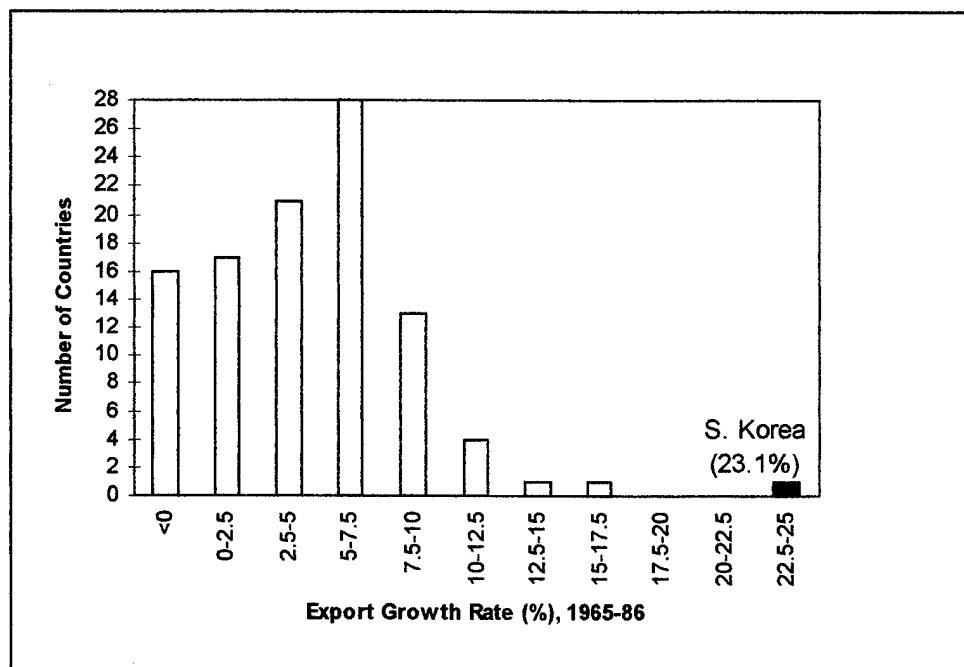


Figure 5.1. World Distribution of Export Growth Rates

Source: World Development Report, 1988. "From Petri, 1990, p. 54."

The export-oriented strategy was not a priority in the First Five-Year Plan (1962-66). Mark Clifford (1994, p. 54) relates that in the draft of the plan there was a section examining how exports could be expanded and that "the members of the revolutionary council initially deleted this section, for they saw little hope for growth." This is consistent with the exchange rate appreciation that happened between 1962 and 1964, since the inflation was not compensated by devaluation. The resulting deterioration of the balance of payments, in turn, led to the adoption of increased import restrictions and the re-establishment of the multiple exchange rate system (Balassa, 1990, p. 4). It seems that the shortage of foreign exchange, some unexpected success in the export sector, and the

indication by the U.S. authorities that economic aid was soon to be terminated, forced the government to turn to an outward-looking strategy.

In this context, some reforms were initiated in 1964. The unification of the exchange rates, devaluation of the exchange rate from 130 to 247 won to the dollar, import liberalization, and incentives to exports were major steps taken at that time. Also that year, the government-sponsored Korea Trade Promotion Association (KOTRA) was founded to promote exports and to carry out market research abroad. Balassa(1990, p. 5) summarizes the government-exporters relation:

Exporters were given the right to import their inputs duty free and without restrictions; they were also provided generous wastage allowances<sup>3</sup> for the importation of raw materials. In 1965, these incentives were extended to indirect exports (the production of domestic inputs for exports) and increased credit preferences were also provided to exporters. In the following year, tariff exemptions were granted to the importers of machinery and equipment used to produce direct and indirect exports and accelerated depreciation allowances were introduced. Furthermore, inputs used in export production were free of indirect taxes and exporters received a 50 percent reduction in their income tax.

“The adoption of the outward-oriented development strategy was accompanied by reform of the financial system” (Balassa, 1990, p. 5). Real interest rates, which had been negative, turned strongly positive in 1965. The result was a substantial increase in the savings deposits, a great part of which came from the curb<sup>4</sup> market. Balassa also indicates the favorable external environment as another decisive factor on the success of South Korea as an exporter country. This was translated in a context of diminishing protection worldwide and in the important U.S. market, and low competition from other developing countries.(p. 57)

Properly valued currency is essential for a country to achieve good results in its trade. The Korean government generally maintained the real value of the won near the level needed for current account balance (Petri, 1990, p. 56). The main exception to this

---

<sup>3</sup> Exporters and suppliers of exporters were given the right to duty-free imports of raw materials and intermediate inputs up to a limit. This limit was determined on the basis of firms' and industries' input-output coefficients plus a margin of “wastage allowance”. The imports acquired under the wastage allowance could be sold domestically, often at a high profit.

<sup>4</sup> The term Curb market here has the same meaning as black market.

generalization occurred during the last half of the 1970s, when Korea sought to shift its economic structure toward heavy industry. This shift in policy and the effects of the two oil shocks, led the government to give greater priority to price stability, which is threatened by devaluation. This resulted in an import substitution strategy, and export growth suffered. The effect of this policy can be seen in Figure 3.2. There was a decreasing tendency on both exports and imports in that period.

Although the Korean government has been interventionist, the export sector has enjoyed a special situation. In effect, exporters were largely exempt from trade barriers. It is reasonable to make the point that the export sector worked as a free market. Petri (1990, p. 69) argues that the allocation of capital was "almost efficient" in the export sector. This means that even the sectoral objectives of the government's lending policy were circumvented by the entrepreneurs. He argues that these bank loans went to large conglomerates, which were involved in an unusually wide range of economic activities. The internal capital markets of large conglomerates "may have 'made up' for efficient formal capital markets by channeling capital into more efficient allocations than implied by policy objectives guiding bank credit." So, for example, one conglomerate that was involved both in the chemical industry and garment industry could have received subsidized credit for the former and channeled it to the latter. This way the efficient allocation of resources was achieved in spite of the government sectoral bias.

In the late 1980s, South Korea became the most open of the world's larger economies. Figure 5.2 shows the distribution of a measure of openness, the sum of exports plus imports to GNP, for medium to large countries, here defined as having population of 20 million or more. In this measure, South Korea was the most open economy in this group of countries.

Mark Clifford (1994, p. 56) calls attention to a problem caused by the government interference targeting the export sector:

Alice Amsden, a scholar who has studied the development of Korea's business groups, cites data showing that in the mid-1970s half the companies polled thought that export targeting had negative effects for them....unprofitable export sales, diversion of production from the domestic to overseas markets and price cutting. But what companies lost on export sales they usually made up in profits in the protected domestic

market. This strategy of forcing domestic consumers to subsidize exports was Korea's way of allowing Korean firms to amass the profits necessary for continued expansion. It reflect Korea's decision to organize an economy to benefit national development. That policy favored companies, not consumers.

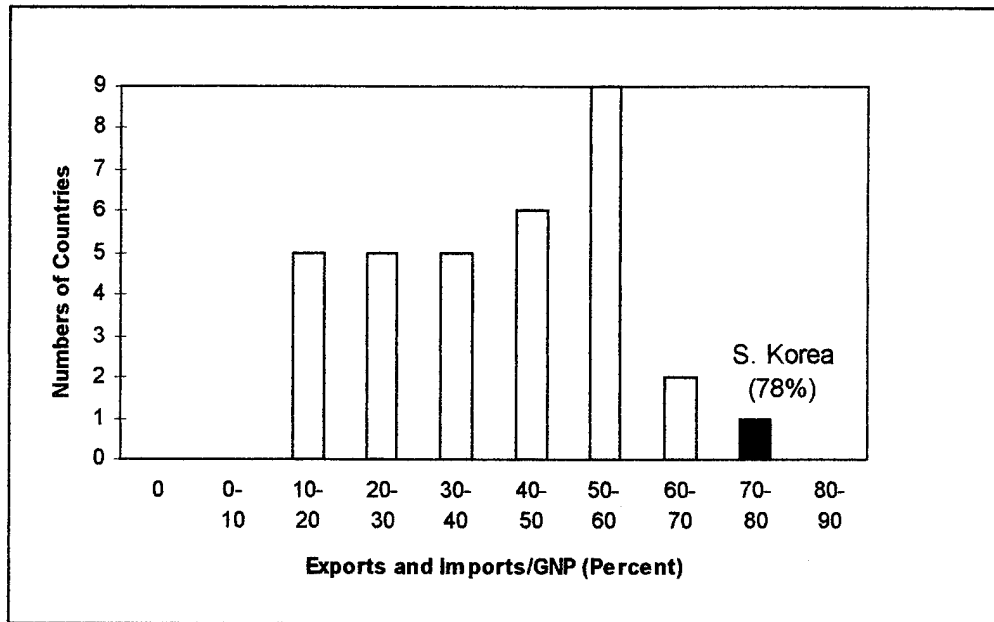


Figure 5.2. World Distribution of Openness in 1986(Larger Countries)

Source: World Development Report, 1988. "From Petri, 1990, p. 58."

### 5. The Heavy and Chemical Industries Plan

In 1972, the Korean government launched its long-term plan for Heavy and Chemical Industries (HCI). It was a significant change in policy. Capital-intensive industries producing intermediate goods and heavy machinery were favored over traditional labor-intensive industries. A target of \$10 billion in exports and a per capita GNP of \$1,000 by 1980 was set (Clifford, 1994, p. 104). The government also decided where plants would be built, what their capacity would be, and which companies would build them (p. 105). The plan identified six leading industries: steel, chemicals, non-ferrous metals, machinery, shipbuilding and the electrical industry.

This change in policy meant a change in priority in the allocation of domestic credit and access to foreign credit. The cost of credit to these industries was reduced through preferential interest rates. Incentives were given in the form of exemption from corporate income taxes and accelerated depreciation provisions. The application of these

measures affected the pattern of investment and the economy as a whole. In fact, it was a setback in the outward-looking strategy.

This plan was launched at a time when the world was facing the adverse effects of the first oil shock. The increase in oil prices forced most countries into economic setbacks. Inflation was rising. In an attempt to control inflation, the exchange rate was maintained constant, despite domestic inflation. This aggravated the situation of reduced availability of funds for traditional export industries. As a result, the export sector was adversely affected. The export growth rates declined after 1976 and the volume of exports fell in real terms in 1979 (Balassa, 1990, p. 7). At the same time fixed investment increased. Since a great part of these fixed assets were imported and financed by foreign borrowing, this contributed to a rapid increase in imports and external debt. These tendencies in imports and exports can be seen in Figure 3.2.

The result of this plan for the Korean economy is a subject of controversy. Michell (1988, p. 53) summarizes the plan's accomplishments in this way:

Of the six industries only one, shipbuilding, which required large number of skilled workers, was totally suited to factor endowments in the Republic of Korea. The electrical industry was to be concerned as much with power-generating equipment as with consumer electronics. In practice only consumer electronics developed rapidly, in line with the country's factor endowments....the electronics industry was a success...but only limited credit for this can go to government planners, who envisaged an electrical industry with a quite different structure. In theory the machinery industry looked like a potential winner, for it too required large numbers of skilled workers. Actually it was again a failure, as it had been in the 1960s. The reason appears to lie both in products and in production processes....The steel industry turned out, against prediction, to be highly efficient and in 1979 was the second most important export sector....The non-ferrous metal and chemical industries were largely intended for import substitution....The fact that their value-added did not increase in the 1970s suggests that these industries had only limited success. The extreme case...was the Korea Aluminium Company, which produced about a quarter of the Republic's needs at a price well above the international level. Even that price was said to be heavily subsidized by KECO, so that it stood at 50 percent less than production costs. All companies requiring aluminium were obliged to buy one quarter of their needs from this company in order to obtain import licenses.



Michell also quotes Professor Hong Wontack when he talks about this policy of making capital cheap in order to induce entrepreneurs to undertake capital-intensive production. He says that it "may be profitable to the subsidized private entrepreneur but may imply a loss for the country as a whole when calculated in terms of real opportunity costs of capital." Moreover, he continues, "the net effect of these policies may be to reduce employment opportunities and to retard the growth of GNP."(p.54)

Dollar and Sokoloff (1990, p. 140) draw this conclusion from the HCI experience:

One thing that does emerge clearly from the Korean experience is that the government cannot simply choose to 'create comparative advantage' in a particular manufacturing industry. If the government directs investment to an industry for which the country does not have the necessary technological capability, the likely outcome is that rapid growth in the capital-labor ratio will be offset by relatively poor TFP [Total Factor Productivity] performance and that the country's firms will not emerge as successful exporters. (Korean petrochemicals is an example.) On the other hand, in industries where the country's firms can develop the necessary technological base, targeted investment will accelerate the shift in comparative advantage in the direction of these industries.

As a long-term strategy, favorable results were expected for the 1980s. Wade (1990, p.319) points out the success of the plan saying that "from the perspective of the mid-1980s and beyond the results do not look nearly as bad as in 1978-80, when many of the negative evaluations were made." He states that "by 1984 60 percent of Korea's exports came from HCIs (in line with the targets set in 1973, at which time the figure was 24 percent)."

The "negative evaluations" that Wade refers to were of the HCI plan which had been pointed to as responsible in great part for the slow-down in the economy in the late 1970s. Figure 3.1 shows the drop in GDP growth that occurred at that time. The negative growth that occurred in 1980 is in part explained by the turbulent political climate that followed the President Park's assassination and by that year's harvest failure. However, the slow-down in the growth has much to do with the change in policy toward heavy and chemical industries. The overvaluation of the exchange rate that had a negative effect on exports, and the limitation of capital for the other sectors, which was a direct result of this policy, hit the South Korean economy in a very dramatic way.

### **C. THE LIBERALIZATION OF THE 1980s**

Since 1979 Korea has pursued a slow, but deliberate policy of liberalization. The government has been withdrawing from intervention in the policy areas of domestic finance, import barriers, and direct export promotion, playing a larger role in social, technological and manpower development. The adverse effect that previous policies had in the economy in the late 1970s, especially those favoring the heavy and chemical industry, called for reconsideration of the policy framework. The economy also had become too large and complex to be subjected to control by the government. The Fifth Five-Year Plan, which went into effect in 1982, clearly shows the government's intention to reinforce the market mechanism. Here are some insights of this Plan as presented by Balassa (1990, p. 7).

In order to sustain long-term growth of exports and the economy as a whole, import liberalization is essential. There is a limit to which a country can improve its industrial structure without import liberalization. Furthermore, a country cannot possibly hope to improve its price competitiveness while its cost of living rises due to import restriction...(p.17)

The single most important change in government industrial policy during the Fifth Five-Year Plan period will be the reduction of the government's role in promoting so-called strategic industries. Investment choices will be left to the initiative of the private sector and the government will provide only the general framework in which such choices will be made by private entrepreneurs in cooperation with their bankers and financiers. (pp. 22-23)

In addition, special efforts will be made to maintain the real interest rate on bank loans and deposits at a positive level and gradually reduce the scope of policy preference loans. (p. 31)

Making a greater use of the market mechanism also implies equalizing in terms of competition and policy incentives for all industries....During the Fifth Five-Year Plan period the government plans to gradually phase out specific incentives and provide instead generalized uniform incentives for investment in all industries. (p. 31)

Needless to say, in practice the government did not stick to the principles as stated in the Plan, and the pace of the reforms has been slower than desired. As Petri

(1990, p. 65) states, "the frequently cited liberalization ratios understate the extent of protection." Special laws restrict the entry of goods in order to protect selected sectors such as telecommunications, pharmaceuticals, and technology development. Agriculture is also an exception to liberalization. It has received higher-than-world-market prices while being sheltered from foreign competition.

Although the previously stated considerations are valid, the announced reforms became a turning point toward a new period in the Korean economy. Some of the most effective tools used by the government to intervene in the economy, including direct subsidies, preferential access to subsidized credit, extensive quantitative import restrictions, and high tariffs, have been eliminated or reduced.

Although the events of 1980 were a threshold for South Korea in terms of the government's role in the economy, important steps toward liberalization were taken in previous periods. However, these previous experiences were not persistent, and constant reversals took place. What made the 1980s liberalization unique is that it was a persistent process and that the government was conscious of its necessity.

### **1. Exchange Rate Policy**

In terms of the exchange rate policy, it is appropriate to say that the Korean government generally maintained a properly valued currency. The main exception to this generalization occurred during the last half of the 1970s when a policy favoring heavy and chemical industries was pursued. In February 1980, however, a new exchange rate regime was adopted, which is still in effect. Under the new system, the dollar exchange rate is determined by movements of the exchange rates of major trading partners as well as by other factors affecting Korea's external position (Koo and Park, 1990, p. 81).

### **2. Import Liberalization**

The import liberalization process was accelerated in the 1980s. Figure 5.3 clearly demonstrates this tendency. It is also clear that this has been a long process. The first significant step was taken in the mid-1960s. In 1967 the "positive" list of admissible imports was replaced by a "negative" list of products whose importation required government authorization. This meant automatic approval for imports of commodities

unless they were explicitly restricted. During the 1970s, some of this progress was reversed. In fact, in that period there was an inward-orientation tendency in the economy, including an increase in tariffs. From the late 1970s on, the liberalization was resumed with a gradual reduction in tariffs and in quantitative restrictions (QRs). While in 1967 there was a one-stage approach in the sense that there was a sudden jump by loosening the quantitative restrictions, the liberalization that began in the late 1970s followed a multistage approach by using the system of "advance notices." Under this system, those sectors affected by liberalization measures were informed in advance, thus giving them time to adjust to the new situation.

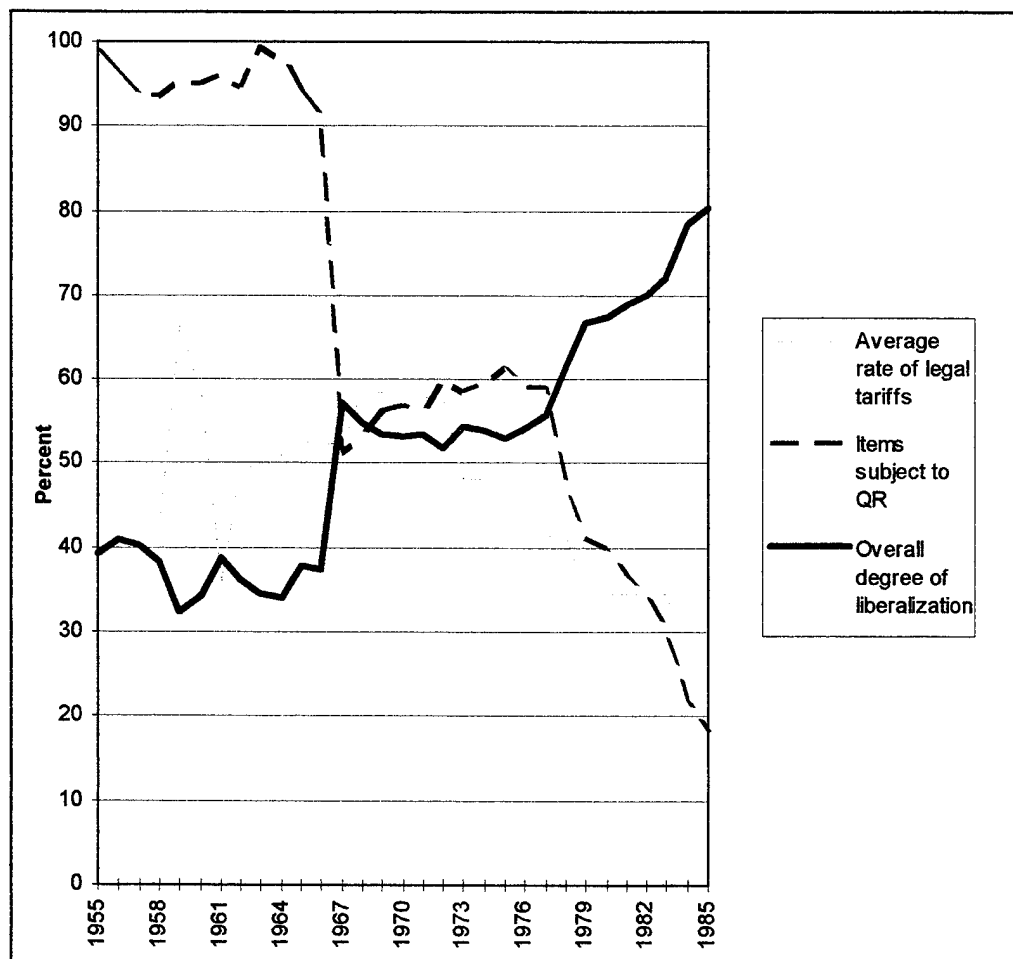


Figure 5.3. Import Liberalization

Source: Kim, 1990, p. 100.

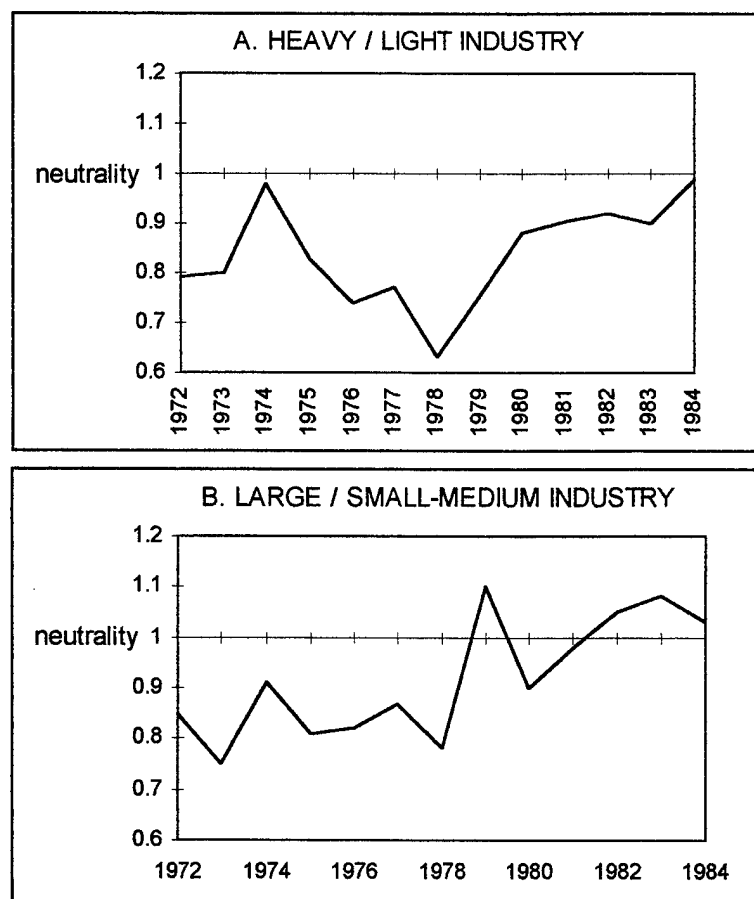
### 3. Financial Liberalization

Financial liberalization has been both arduous and important. That is because repression in this sector was the main tool used by the government to intervene in the economy. Yet considerable progress has been made in giving financial institutions greater freedom to set their own prices and to attract and allocate funds. A tentative first step was made in 1973 when the government transferred to the Korea Traders Association its shares in the Commercial Bank of Korea. The denationalization of commercial banks, however, occurred between 1981 and 1983. The government turned all nationwide citybanks over to private ownership, and reduced its control over day-to-day operations. It is also true that banks were left very vulnerable because a substantial part of their outstanding loans remained policy related and the government remained in control of the interest rates.

Although the government maintained interest rate ceilings on bank deposits and loans, the real interest rate of interest was turned positive, in contrast to the negative real rates prevalent throughout most of the 1970s. In 1984, a band of rates ranging from 10 to 10.5 percent a year was introduced to permit banks to charge different rates on the basis of borrowers' creditworthiness (Kim, 1990, p. 200). It was a very narrow band but a first step in changing the previous policy, which stipulated a fixed ceiling of, for example, 10%. This band was widened and the upper limit raised to 11.5 percent at the end of the year. Banks' operations were facilitated in the early 1980s, when hundreds of regulations and directives were abolished or simplified (Kim, 1990, p. 200).

A very significant development in finance reform was the abolition, in June of 1982, of the preferential lending rate system previously used to subsidize the so-called strategic sectors (World Bank, 1987, p. 82). This, together with the maintenance of positive real interest rates, served to reduce the distortion in financial costs among different sectors. In contrast, the promotion of small-and-medium-sized firms was highlighted. Commercial banks were required to extend at least 35 percent of their loans to these firms (Kim, 1990, p. 201). Figure 5.4 (A, B and C) reflects the financial favoritism to certain sectors, and the tendency to neutrality after the reforms of the 1980s.

Panel A shows the favoritism given to heavy and chemical industries. Beginning in 1974, the year in which the HCI began to claim a decidedly larger share of preferential loans, the gap in effective borrowing cost began to widen in its favor. This disparity began to recede in 1984, thus approaching neutrality. A similar bias can be seen in panel B. At first, in favor of the large industries, with the reforms of the 1979-80, an abrupt change occurred in favor of the light industries, which also soon approached a state of neutrality. A preference was accorded to export vis-à-vis domestic industries, being maintained throughout the South Korea's high-growth period. This situation was not observed during the import-substitution period of the mid-1970s. It was reestablished after that.



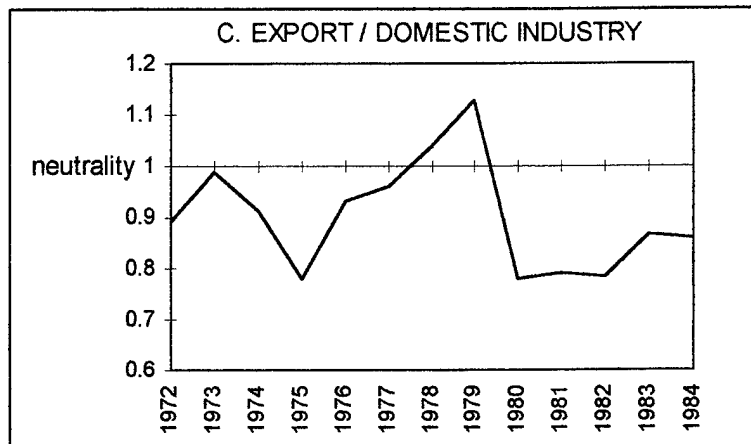


Figure 5.4 - Ratio of Borrowing Costs for Selected Industrial Sectors

Source: World Bank, 1987, p. 43.

#### 4. Preferential Credit Policy

Another important step in the process of liberalization was the reduction of the scope of directed credit toward selected sectors of the economy. Credit preferences to capital-intensive industries, which had been the main policy during the 1970s, were eliminated. The seven existing promotional laws governing machinery, electronics, textiles, iron and steel, non-ferrous metals, petrochemicals, and shipbuilding were replaced in 1985 by the Industrial Development Law (World Bank, 1987, p. 105). The industry-specific approach was replaced by a functional approach. Balassa (1990, p. 10) states that “it is of particular importance that the new industrial policy apparatus lacks a mechanism for ‘picking winners,’ who often turn out to be losers.”

Figure 5.5 (A, B, and C) presents data that the World Bank (1987, p. 52) regards as “indications that the reorientation of Korean industrial policy begun in 1979 is taking root”. A converging trend toward neutrality in average returns to capital among industries can be seen. Large firms and small and medium firms earned rates of return that were roughly equal in 1972-73. This parity disappeared during the decade, as small and medium firms had better performance. It converged again in the period between 1982 and 1984. A similar converging trend appears when returns on exports are compared with returns on the domestic sector. In the 1974-79 period, exports had significantly less return. That was the period that the government favored heavy and chemical industry. When the heavy industry’s return is compared with that of light industry, it is evident that

the former lags behind for almost the whole decade. The disparity was more severe between 1978 and 1980. After that, the trend toward neutrality started to emerge.

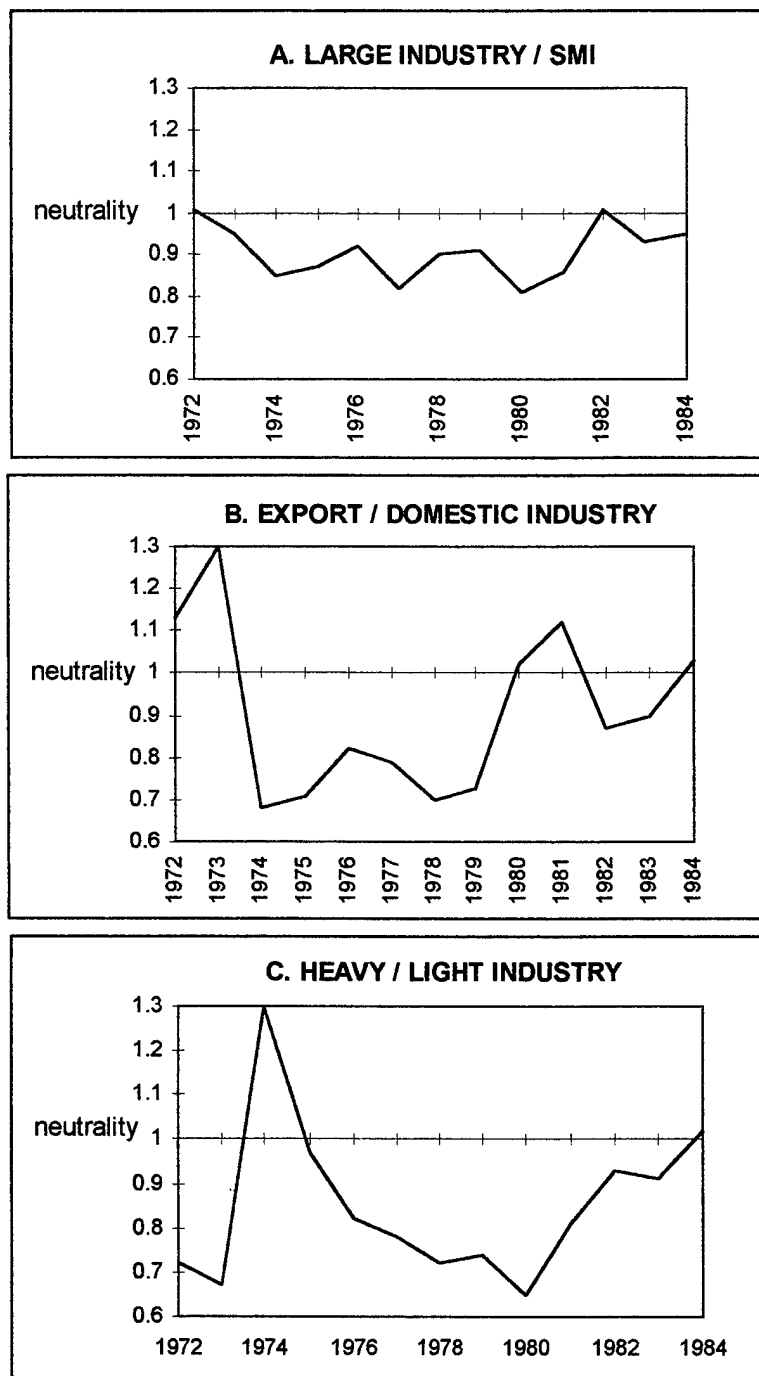


Figure 5.5 - Trends in the Ratio of Industrial Performance for Selected Industrial Sectors (Average Returns to Capital Measure<sup>5</sup>)

Source: World Bank, 1987, p. 53.

<sup>5</sup> Measured by the profits to assets ratio.



## 5. Income Tax Reform

An important step that helped economy to maintain sustained growth from the 1980s on was the reduction in income tax implemented by the government between 1982 and 1984. Chan (1990) studied the effect of changes of the Korean tax rate on tax revenue. His study focused on the above ten million won income group and the above 65 million won income group. The findings of his research are shown in Table 5.1 and can be summarized as follows:

Analysis of the tax cuts in the above ten million won income group showed that lowering marginal tax rates contributed to income growth and higher level of tax revenue even with a falling tax rate. However, with the first installment of the tax cut in 1982, tax revenues fell with the fall in tax rate for taxpayers with incomes above 65 million won. This result makes sense because the taxpayers knew the 1984 tax cut was coming.... Conversely, the reduction in tax rate in 1984 caused a rise in tax revenue for this high-income group.

Table 5.1. Effect of the Tax Cut of the 1980s

Above 10 Million Won Tax Brackets					Above 65 Million Won Tax Brackets			
Year	Tax rate %	Tax payers (person)	Taxable Income (billion won)*	Tax Revenue (billion won)*	Tax rate %	Tax payers (person)	Taxable Income (billion won)*	Tax Revenue (billion won)*
1980	35 - 70	22,143	533.8	222.5	60 - 70	764	179.5	113.4
1981	40 - 70	22,443	525.5	186.8	65 - 70	742	151.4	95.4
1982	32 - 62	28,198	597.3	200.9	56 - 62	748	127.3	70.1
1983	32 - 62	34,968	712.0	233.7	62	854	126.8	69.1
1984	21 - 55	59,249	1,286.3	343.1	55	1,586	246.3	118.1
1986	24 - 55	83,186	1,784.9	470.6	55	2,240	298.8	140.1
1987	24 - 55	94,404	2,051.2	561.0	55	3,245	415.2	194.2
1988	24 - 55	96,172	2,256.2	638.3	55	3,767	460.4	214.6

Source: After Chan, Hyung Son (1990, p. 22, 26)

\*Note: In 1985 won.

## 6. Liberalization and Economic Growth

The effect that the process of liberalization had on economic growth in South Korea is an important element to consider when deciding what is responsible for the Korean performance. The persistent trend toward neutrality showed in figures 5.4 and 5.5

already suggests that liberalization had a positive effect on the allocation of resources. This points toward the private market as being more efficient than the government. The definitive argument would be the establishment of a systematic relationship between economic growth and liberalization. Because liberalization embraces measures that decrease government action in many sectors, such as regulation, trade, taxes, finance, to name a few, it is difficult to measure the impact of the overall liberalization on the macroeconomic variables. However, a relation can be found between some macroeconomic variables and some components of liberalization. This is what the regression analysis, as described below, tries to accomplish.

The goal herein is to empirically discover the relationship between the economic growth rate, the degree of import liberalization, and the relative size of government spending. These are two important areas where the government's role in the economy can be easily perceived. Annual data for each of these series from 1956 to 1985 are presented on Table 5.2 and used in the analysis.

The free market theory expects that the growth rate is positively correlated with import liberalization and negatively correlated with government spending. With the resources in the hands of the private sector and the country open to the world market, profit incentives lead entrepreneurs to allocate these resources to activities where the country has a comparative advantage<sup>6</sup>. On the other hand, if the interventionist argument holds, the opposite relationship is expected.

The results shown in the regression analysis output, Table 5.3, conforms with the free market theory's expectations. The positive slope of the regression equation with respect to import liberalization shows that the more open to trade the economy is, the greater the estimated growth rate is. On the other hand, the negative slope regarding government spending shows that economic growth decreases when the government increases its spending. Of course it is not just the fact that the government spends that causes the expected growth rate to decrease. The government spends money collected from the private sector through taxes, which ultimately reduces private spending. Since

---

<sup>6</sup> The free market theory argument is discussed in more detail in Chapter IV.

the government is less efficient than the private sector in the allocation of resources, according to the free market theory, this causes the growth rate to decrease.

Table 5.2. Import Liberalization, Government Spending and Growth (in percent)

Year	Inverted Total Tariffs Rate* (1)	Degree of Liberalization from QRs (2)	Overall Degree of Liberalization Avg (1) & (2)	Share of Government Spending in GNP (GY)	GDP per Capita Growth	GDP per Capita Growth - Three-year Moving Average
1956	78.5	3.5	41.0	18.50	-4.080	
1957	73.9	6.4	40.2	18.36	4.584	1.032
1958	70.0	6.3	38.2	19.09	2.593	2.710
1959	60.1	4.7	32.4	19.11	0.954	0.615
1960	63.3	5.0	34.2	22.11	-1.702	0.702
1961	73.5	4.0	38.8	22.38	2.856	0.145
1962	66.8	5.4	36.1	21.25	-0.717	2.745
1963	66.3	0.4	34.4	17.69	6.097	3.985
1964	66.2	2.0	34.1	13.60	6.576	5.329
1965	65.5	5.9	37.8	15.68	3.313	6.543
1966	65.7	9.1	37.4	16.70	9.740	4.947
1967	65.5	48.7	57.1	18.16	1.787	6.765
1968	62.9	46.6	54.8	19.63	8.769	7.292
1969	63.2	43.8	53.5	18.77	11.321	8.830
1970	63.1	43.0	53.1	17.42	6.399	8.263
1971	63.3	43.7	53.5	16.76	7.070	5.808
1972	63.5	40.1	51.8	14.79	3.954	7.822
1973	67.5	41.3	54.4	12.92	12.441	7.491
1974	67.5	40.5	54.0	15.33	6.077	7.952
1975	67.5	38.5	53.0	16.97	5.338	7.504
1976	67.5	40.9	54.2	17.26	11.097	8.271
1977	70.8	40.8	55.8	17.51	8.379	9.175
1978	70.7	52.2	61.5	18.05	8.048	7.471
1979	74.4	58.8	66.6	18.08	5.985	3.452
1980	74.4	60.1	67.3	21.01	-3.676	2.457
1981	74.4	63.4	68.9	20.10	5.063	2.340
1982	74.4	65.4	69.9	20.66	5.634	6.950
1983	74.4	69.6	72.0	21.23	10.151	7.948
1984	78.9	78.3	78.6	20.87	8.060	8.031
1985	79.1	81.7	80.4	20.54	5.883	

Source: Liberalization: Kim (1990, p.100). GY: Lee (1990, p. 267).

Growth: IMF, International Financial Statistics Yearbook 1984 and 1986.

\*The legal tariff rate is inverted in percentage form to show the degree of import liberalization in terms of tariffs.

Some considerations about the numbers shown in the output are noteworthy. That the R-square adjusted of 27.4% was well below 100% was expected since so many potential variables influence economic growth. If the change in these two variables explain 27.4% of the variation from the mean of the economic growth, this can be considered significant. The t-ratio shows that the constant and the explanatory variables

coefficients are 2.66, 2.67 and -2.97 standard deviations from their respective means. This implies that these parameters are significantly different from zero and are not just the result of random error. The p-value gives significance to these parameters at a level greater than 98%.

Table 5.3. Regression Analysis Output

#### Regression Analysis

The regression equation is

$$\text{Growth} = 14.0 + 0.130 \text{ Liberali} - 0.845 \text{ G. Spend}$$

Predictor	Coef	Stdev	t-ratio	p
Constant	14.004	5.273	2.66	0.013
Liberali	0.12988	0.04869	2.67	0.013
G. Spend	-0.8452	0.2842	-2.97	0.006

s = 3.587    R-sq = 32.4%    R-sq(adj) = 27.4%

#### Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	2	166.26	83.13	6.46	0.005
Error	27	347.34	12.86		
Total	29	513.60			

#### SOURCE    DF    SEQ SS

Liberali	1	52.48
G. Spend	1	113.78

#### Unusual Observations

Obs.	Liberali	Growth	Fit	Stdev.Fit	Residual	St.Resid
1	41.0	-4.081	3.693	0.858	-7.774	-2.23R
25	67.3	-3.676	4.988	1.130	-8.664	-2.55R

R denotes an obs. with a large st. resid.

Durbin-Watson statistic = 1.96

No evidence of lack of fit (P > 0.1)

It is also important to call attention to a possible problem of correlation that can happen between the relative size of government spending and the economic growth rate during periods of economic recession. This correlation could influence the result of the regression analysis toward a negative relationship between these variables. During a recession, both the GNP and the economic growth decrease. The government spending is likely to continue at the same level, if the recession period is short, or decrease slower than the GNP, if the recession period is extended. This causes an increase in the relative size of the government (spending/GNP). In such a situation, these variables move in opposite directions. It is clear, however, that the decrease in economic growth is not caused by the increase in the relative size of the government. It is caused by the factors that lead the country into a recession.

To correct for this, two approaches were used. First, a regression was run using the same data from Table 5.2 except for those years with negative economic growth rates, so as to eliminate the periods of recession from the data. Second, a three-year moving average was used for the dependent variable "growth rate". This technique has the effect of smoothing the fluctuation on the variables caused by periods of recession.

The results for the first approach are shown on Table 5.4. Notice that there is a significant decrease on some indicators. The level of confidence for the variable "government spending" drops to 91.8%. The R-sq adjusted falls by almost a half. Also, the Durbin-Watson statistic deteriorates. This test statistic is expected to be as close as possible to two, in absence of correlation between variables. However, the relationship found in the previous regression still holds.

Table 5.5 shows the results for the second approach. Notice that now the relationship found in the first regression is made stronger. The t-ratio for all variables improved considerably. The p-value gives significance to these parameters at a level of more than 99%. The R-square adjusted almost doubled. Only the Durbin-Watson statistic dropped to a level that suggests the existence of some correlation among variables. Improvement on this analysis can be the subject of further study.

Table 5.4. Regression Analysis Output for Years  
without Recession

### Regression Analysis

The regression equation is

$$\text{Growth} = 9.67 + 0.0991 \text{ Liberali} - 0.472 \text{ G. Spend}$$

Predictor	Coef	Stdev	t-ratio	p
Constant	9.669	4.345	2.23	0.036
Liberali	0.09909	0.04373	2.27	0.033
G. Spend	-0.4716	0.2595	-1.82	0.082

$s = 2.775$      $R\text{-sq} = 21.1\%$      $R\text{-sq}(\text{adj}) = 14.2\%$

### Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	2	47.228	23.614	3.07	0.066
Error	23	177.076	7.699		
Total	25	224.304			

SOURCE	DF	SEQ SS
Liberali	1	21.797
G. Spend	1	25.431

Durbin-Watson statistic = 2.45

No evidence of lack of fit ( $P > 0.1$ )

## 7. Government Spending and Economic Growth

Jisoon Lee (1990) conducted a study searching for any meaningful relationship between economic growth and government spending and reached at a conclusion similar to that of the regression above. He used an extension of the Solow's<sup>7</sup> neoclassical growth model. He also ran a regression relating growth rate of the economy to the relative size of government spending, and the share of public investments in total government spending.

<sup>7</sup> For more details about the Model see Lee (1990, p.263).

Table 5.5. Regression Analysis Output for Three Year Moving  
Average Growth Rate

Regression Analysis

The regression equation is

$$\text{Growth} = 10.9 + 0.125 \text{ Liberali} - 0.652 \text{ G. Spend}$$

Predictor	Coef	Stdev	t-ratio	p
Constant	10.900	3.084	3.53	0.002
Liberali	0.12533	0.02987	4.20	0.000
G. Spend	-0.6520	0.1620	-4.02	0.000

$s = 2.034$      $R\text{-sq} = 53.1\%$      $R\text{-sq}(\text{adj}) = 49.4\%$

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	2	117.165	58.583	14.16	0.000
Error	25	103.404	4.136		
Total	27	220.570			

SOURCE	DF	SEQ SS
Liberali	1	50.159
G. Spend	1	67.006

Unusual Observations

Obs.	Liberali	Growth	Fit	Stdev.Fit	Residual	St.Resid
23	66.6	3.452	7.460	0.597	-4.007	-2.06R
25	68.9	2.341	6.431	0.667	-4.090	-2.13R

R denotes an obs. with a large st. resid.

Durbin-Watson statistic = 1.00

No evidence of lack of fit ( $P > 0.1$ )

His conclusion was that the overall growth of the relative size of the government spending has been unfavorable to economic growth.(p. 289) Another significant finding of his study is about the effect that public investment has had in the economic growth and how productive it has been when compared with private spending. Using separate

variables for the private capital stock and the public capital stock, he found that each unit of private capital contributed about ten times as much to output as a unit of government-owned capital. In his conclusion he states<sup>8</sup>:

...during the sample period the private capital has been about ten times as productive as the public capital. Therefore, even though there exists evidence that the public capital has been productive and has helped the economy to grow, it still appears to be the case that the accumulation of the private capital has been mainly responsible for the rapid economic growth.(p. 288)

Lee also focused his study on the size of the government. He states that both the absolute and relative size of the government in South Korea have rapidly grown between 1953 and 1986<sup>9</sup>. However, the share of the government spending in GNP is still smaller than that for most of the other countries (Table 5.6). That is, despite its rapid growth, the government sector in Korea is still relatively small. (p. 276)

Table 5.6. Relative Size of Government: World (in percent)  
(average of 1980-85):

	Total	Defense	Education	Health	Welfare
Industrial countries	44.2	4.3	5.0	5.3	14.1
U.S.	36.5	6.1	5.0	4.1	9.6
W. Germany	48.7	2.8	4.2	8.1	21.7
U.K.	45.0	5.2	5.4	4.6	14.2
Singapore	26.5	5.5	5.6	1.7	1.8
Japan	18.2	n.a	n.a	n.a	n.a
Taiwan	23.0	5.5	3.7	0.5	0.8
Argentina	36.1	1.8	3.4	1.4	8.7
Chile	33.3	3.6	5.0	1.9	13.7
Hungary	59.4	2.3	3.1	4.0	15.9
Korea	24.8	5.4	4.2	0.6	3.5

Source: From Lee (1990, p. 274)

<sup>8</sup> The capital productivity calculation was based on the result of a nonlinear regression relating growth rates to investment shares, and relative size, applied to parameters of the Solow's model.(see Lee, 1990. p. 286)

<sup>9</sup> The absolute size, which is a measure of the real government spending, has grown on an average of 9% in this period. The relative size, which is the share of government spending in GNP, has also grown from 10.9% in 1953 to 20.2% in 1986.



This result is another expectation of the free market theory. With little government spending the Korean economy depended mainly on the private sector. This, according to the free market view, allowed the economy to grow at high rates.

## VI. ANALYSIS

This thesis focused on the controversy that divides economists regarding South Korean performance: if it has been good enough, if the government has been overly interventionist, and what has been responsible for the results, the government or the private market. This chapter focus on the findings of this research in relation to these points. First, the Korean performance will be analyzed. Then, in the same context, the other points of the controversy will be considered.

The first conclusion about the Korean performance is that it has been outstanding. This is evident when its average GDP growth rate from 1964 to 1992 is compared to other countries. While South Korea grew at 8.84%, the developing countries grew at 4.66% and industrialized countries grew at 3.26%. Also, the persistent increase in its participation in the international trade (exports and imports) shown in Figure 3.2 supports this argument. South Korea's exports, for example, grew at 23.1% per annum between 1965 and 1986 (see Figure 5.1).

The second point is that South Korea cannot maintain the current level of investment for a long period of time. As a consequence, it needs to improve the efficiency in the use of its resources in order to sustain economic growth. The consistent level of investment maintained by industrialized countries, in the range of between 20% and 25% (see Figure 3.3), strongly suggests that this is the feasible level in a period of sustained growth. The slight decreasing trend in the GDP growth rate shown in recent years (see Figure 3.1) can be the first sign that the Korean economy cannot support the same level of investment. The studies of Professors Alwyn Young and Laurence Lau (see Chapter III, C), conclude that the efficiency in the use of resources is not enough to sustain economic growth with a lower level of investment.

Regarding the roles of the government and the private market, economists have placed themselves at either extreme of the controversy, giving credit either to the government or to the market for the economic growth, depending on the economists' point of view. I will argue that both the government and the market have their contributions. The government's and market's role, and the resulting contribution for

economic growth, have been different for various periods in the Korean economy. I will argue also that the government's contribution was not always beneficial suggesting that less government input would have lead to more impressive results.

South Korea's recent economic history, in terms of the roles of the government and private market, can roughly be divided into three periods: First, the period comprising the post-Korean War, from 1953 until the military coup occurred in 1961; second, from 1962 until 1980, characterized by high growth; and third, from 1980 to the present, the liberalization period.

In the first period, the government was highly interventionist and the results in terms of economic growth were poor. Priority was given to political considerations, not economic development. Import substitution was the strategy pursued by the government, with overvaluation of the exchange rate and high restrictions on imports. Figure 5.3 shows how isolated the economy was from the international market. For a country densely populated and limited in natural resources, this isolation from the world market prevented the Korean economy from exercising its full potential. The private market was limited by the government's policies. It can be concluded that these policies were an obstacle to the full realization of the nation's economic potential. As a consequence, the growth rate of the GDP was low as shown in Figure 3.1.

In the second period, there was an interplay between the government and private sector resulting in high economic growth. The government formulated the plans for the economy and the policies to influence the decision making process inducing the private sector to carry it out. The private market responded to the policies thereby taking advantage of the government's incentives. This environment cannot be considered a free market economy. However, the policies were built in such a way that the market was able to operate with consistent signs with consequent benefits for economic growth.

Evidence about the government influence in the economic growth in this period comes from the policies used as instruments to influence the private market. Public enterprises were established in basic sectors with high degree of linkages and scale economies. The financial system was controlled by the government. A ceiling was put on interest rates. Loans at low rates of interest were ensured to entrepreneurs willing to take

on activities considered strategic by the government. Using these instruments, the government was able to influence the allocation of resources toward specific activities. The government had influence over what the economy was to produce. The heavy and chemical industry is the clearest example of how the structure of the economy was modified by government intervention. So, the government had participation in the economic growth as it occurred.

The market's actions as factors able to influence economic growth cannot be seen as directly as the government's actions, but can be inferred from the resulting environment in which it worked. A favorable environment was present in the Korean economy in the 1960s and 1970s. It can be implied from the government priority on economic advancement, outward trade orientation, low price distortions, and significant steps taken toward liberalization in the mid-1960s.

The government made economic advancement a top priority<sup>1</sup>. It had a positive impact on the economy, as the market perceived less risk for its investment. The level of investment depends on the entrepreneurs' expectations about the future. In developing countries the perceived government's intention is an important factor to be considered by investors. The outward trade orientation strategy allowed the economy to be integrated into the world market. This increased both exports and imports leading to economic growth. The extent to which the Korean economy became open can be seen by the rapid increase in imports and exports shown in Figure 3.2. The link between trade orientation and economic growth was shown by the World Bank's study presented in Chapter IV. This study found South Korea strongly outward oriented.

Further evidence of the market's contribution to economic growth in response to the favorable environment is the low price distortion present in the Korean economy. This low price distortion was found by the World Bank's study presented in Chapter IV. Also, the correlation between price distortions and economic growth was captured in this study. A significant step toward liberalization was taken in the mid-1960s as shown in

---

<sup>1</sup> Although this event sounds like a government intervention, in fact it is not. This is the sound climate expected by entrepreneurs in a free market. This is also true when referring to the fact that the government adopted an outward trade orientation strategy, or maintained a properly valued exchange rate.

Figure 5.3. This means that the government decreased its degree of intervention in this period allowing the private market to exercise its actions with more degree of freedom.

From 1980 on, as the economy became big and more complex, the liberalization process was accelerated, thus substantially increasing the private market's influence in economic growth. The government has been withdrawing from intervening in the market place. Market forces are now the main source of the economic growth. Yet, the government maintains its hand in the economy, mainly through special laws designed to protect selected sectors, such as telecommunications, pharmaceuticals, and technology development. The main tools of Korean government intervention, however, including subsidies, preferential access to subsidized credit, extensive quantitative import restrictions, and high tariffs have been eliminated or reduced.

Import liberalization, including reduction on tariffs and quantitative restrictions, is shown in Figure 5.3. This process made South Korea become, in 1986, the most open of the world's larger economies (see Figure 5.2). The abolition of the preferential lending rate system and the reduction of the scope of directed credit toward selected sectors of the economy, reduced significantly the distortion in financial costs and returns to capital among different sectors (see Figure 5.4 and 5.5). This is the most significant step toward a free market, since it allows private entrepreneurs to allocate the resources in the activities where the country has a comparative advantage.

There is also substantial evidence that the economy was negatively affected by the government's intervention. Inefficiency in public enterprises, distortions in the allocation of credit that did not reflect the cost of money, limited growth in the export sector in the late 1970s due to preferential policies benefiting the heavy and chemical industry, and business concentration leading to a lack of competitiveness are some examples. This prompts a question: Would South Korea have done better with less government intervention? Besides the above, this research presented two main pieces of evidence for an affirmative answer to this question. First is the regression analysis performed in chapter V showing that the GDP growth rate is positively related to liberalization and negatively related to government spending. Second are the results of

Jisoon Lee's study pointing in the same direction, and further stating that the private capital has been about ten times as productive as public capital.

The result of the regression model is very suggestive and, in my point of view, helps to solve the controversy. This economic growth, as it occurred, has contributions from both the government and private sector, as shown above. However, with the economy working as a free market with the resources in the hands of private entrepreneurs, the economic growth could have been higher.



## VII. CONCLUSION

This thesis was an attempt to assess how good has been the Korean performance since the end of the Korean War and to decide what has been responsible for the economic growth, the government or the free market forces. To do so, the main facts about the Korean performance were presented and analyzed and the roles of the Korean government and of the free market in the economy were discussed.

The Korean performance has been outstanding. Supporting this conclusion are its GDP growth rate, which is far superior to the average achieved by other developing and industrialized countries, and its remarkable increase in participation in the international market, measured by its volume of imports and exports. However, there is evidence of notably low efficiency in the use of resources by the Korean economy, threatening a future sustained growth.

The government's and market's role, and the resulting contribution to the economic growth, have varied in different periods in the Korean economy. First was the period ranging from the end of the Korean War until the military coup of 1961, characterized by a highly interventionist government and a poor result in terms of economic growth. The import substitution strategy adopted in this period isolated the economy from the international market limiting it from exercising its full potential. Second, from the military coup until 1980, was an interplay between the government and private market, thus resulting in high growth. The government's policies in this period were able to influence the allocation of resources and the shape of the economy. The private sector took advantage of these government incentives, operating in an environment with favorable and persistent signs: the government priority on economic advancement, outward trade orientation, low price distortions, and significant steps toward liberalization as taken in the mid-1960s. The third period, from 1980 to the present, was characterized by liberalization of the economy. The main tools used by the government to intervene in the economy have been eliminated or reduced.

Evidence that the economy was negatively affected by government intervention was found. A regression was run relating the GDP growth rate to the degree of trade



liberalization and the level of government spending. The result was that the GDP growth rate was positively related to trade liberalization and negatively related to government spending.

## LIST OF REFERENCES

- Balassa, Bela, "Korea's Development Strategy", in Kwon, Jane K., ed., Korean Economic Development, Greenwood Press, New York, Westport, London, 1990.
- Chan, Hyung Son, Supply-Side Economics in the Republic of Korea, 1990, Naval Postgraduate School Thesis Research.
- Chen, Edward K. Y., Hyper-growth in Asian Economies: A Comparative Study of Hong Kong, Japan, Korea, Singapore and Taiwan. London, 1979, Macmillan.
- Cho, Yoon Je, "The Financial Policy and Financial Sector Development in Korea and Taiwan", in Kwon, Jane K., ed., Korean Economic Development, Greenwood Press, New York, Westport, London, 1990.
- Clifford, Mark L., Troubled Tiger, Businessmen, Bureaucrats, and Generals in South Korea. East Gate Book, Armonk, New York, 1994.
- Cowen, Tyler, "Public Goods and Externalities", in Henderson, David R., ed., The Fortune Encyclopedia of Economics, Warner Books, New York, NY, 1993.
- Dollar, David and Sokoloff, Kenneth, "Changing Comparative Advantage and Productivity Growth in the Manufacturing Industries", in Kwon, Jane K., ed., Korean Economic Development, Greenwood Press, New York, Westport, London, 1990.
- Gwartney, James D. and Stroup, Richard L., Macroeconomics: Private and Public Choice, The Dryden Press, 1992.
- Hasan, Parvez, Korea: Problems and Issues in a Rapidly Growing Economy. Baltimore and London, The Johns Hopkins University Press, 1976.
- Hasan, Parvez, Korea: Problems and Issues in a Rapidly Growing Economy. Baltimore and London, The Johns Hopkins University Press, 1976.
- Hessen, Robert, "Capitalism", in Henderson, David R., ed., The Fortune Encyclopedia of Economics, Warner Books, New York, NY, 1993.
- International Monetary Fund, International Financial Statistics Yearbook, 1994.
- Jones, Leroy, and Sakong, I. L., Government, Business, and Entrepreneurship in Economic Development: The Korean Case, Howard Press, Cambridge, MA, 1979.
- Kim, Pyung Joo, "Korea's Financial Evolution, 1961-1986", in Kwon, Jane K., ed., Korean Economic Development, Greenwood Press, New York, Westport, London, 1990.

Koo, Bon Ho and Park, Won Am, "Exchange Rate Policy in Korea", in Kwon, Jane K., ed., Korean Economic Development, Greenwood Press, New York, Westport, London, 1990.

Krugman, Paul, The Myth of Asian's Miracle, FOREIGN AFFAIRS, November/December 1994.

Kwon, Jane K., Korean Economic Development, Greenwood Press, New York, Westport, London, 1990.

Lau, Laurence and Kim. Jong-Il, The Sources of Growth of the East Asian Newly Industrialized Countries, Journal of the Japanese and International Economies 8, 1994.

Lee, Jisoon, "Government Spending and Economic Growth", in Kwon, Jane K., ed., Korean Economic Development, Greenwood Press, New York, Westport, London, 1990.

Lee, Young Ki, "Conglomeration and Business Concentration in Korea", in Kwon, Jane K., ed., Korean Economic Development, Greenwood Press, New York, Westport, London, 1990.

Little, Ian M. D., 1994, Trade and Industrialization Revisited, Nuffield College, Oxford, unpublished paper.

Mason, Edward, et al., The Economic and Social Modernization of the Republic of Korea, 1980, Cambridge, Harvard University Press.

Michell, Tony, From a Developing to a Newly Industrialised Country: The Republic of Korea, 1961-82, International Labour Office, Geneva, 1988.

Myrdal, G., Asian Drama: An Inquiry into the Poverty of Nations, New York, Pantheon, 1968.

Petri, Peter A., "Korean Trade as Outlier: An Economic Anatomy", in Kwon, Jane K., ed., Korean Economic Development, Greenwood Press, New York, Westport, London, 1990.

Rodrik, Dani, Getting Interventions Right: How South Korea and Taiwan Grew Rich, NBER Working Paper No. 4964, Cambridge, MA, 1994.

Rodrik, Dani, Getting Interventions Right: How South Korea and Taiwan Grew Rich, NBER Working Paper No. 4964, Cambridge, MA, 1994.

Shaw, Jane S., "Public Choice Theory", in Henderson, David R., ed., The Fortune Encyclopedia of Economics, Warner Books, New York, NY, 1993.

Smith, Adam, *An Inquiry into the Nature and Causes of the Wealth of Nations*. Edited by Edwin Cannan, The University of Chicago Press, 1976.

Stigler, George J., "Monopoly", in Henderson, David R., ed., *The Fortune Encyclopedia of Economics*, Warner Books, New York, NY, 1993.

Wade, Robert, *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*, Princeton, NJ, Princeton University Press, 1990.

World Bank, "Korea, Managing the Industrial Transition", Washington, D. C., 1987.

World Bank, *The Third World Survey*, *The Economist*, September 1989.

World Bank, *World Development Report 1983*, World Bank, Washington, D.C.

World Bank, *World Development Report 1987*, World Bank, Washington, D.C.

World Bank, *World Development Report 1992, Development and the Environment*.

Woronoff, Jon, *Asia's Miracle Economies*, M. E. Sharpe, Inc, Armonk, N.Y., London, England, 1992.

Young, Alwyn, 1993, *Lessons from the East Asian NICs: A Contrarian View*, NBER working paper No. 4482. *European Economic review* 38, 1994.



## INITIAL DISTRIBUTION LIST

- |    |  |   |
|----|--|---|
| 1. | Defense Technical Information Center<br>8725 John J. Kingman Rd., STE 0944<br>Ft. Belvoir, Va 22060-6218   | 2 |
| 2. | Library, Code 13<br>Naval Postgraduate School<br>Monterey, California 93943-5101   | 2 |
| 3. | Superintendent<br>Chairman, Code SM<br>Department of Systems Management<br>Naval Postgraduate School<br>Monterey, California, 93943                      | 1 |
| 4. | Superintendent<br>Prof. David R. Henderson, Code SM/Ht<br>Department of Systems Management<br>Naval Postgraduate School<br>Monterey, California, 93943   | 2 |
| 5. | Superintendent<br>Prof. Katsuaki L. Terasawa, Code SM/Tk<br>Department of Systems Management<br>Naval Postgraduate School<br>Monterey, California, 93943 | 1 |

6. Ten Cel Antonio Carlos Stangherlin Rebelo 2  
Secretaria de Economia e Finanças da Aeronáutica  
Explanada dos Ministérios, Bloco M  
Brasília, DF, Brazil

o